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LATROBE VALLEY FIELD NATURALISTS' CLUB

MONTHLY NEWSLETTER

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as a Periodical.

Issue No. 38.

February 1967

MONTHLY NEWSLETTER.

Dear Fellow Field Naturalists,

This issue of the Newsletter marks the first for the year 1967. Because of difficulties that arose during December 1966, the issue for that month was not available for posting until January, which then made it impracticable to publish one for the first month of the new year. However, arrangements by the Secretary, Mr. Belgraver, for printing the Newsletter promise an uninterrupted period of publication, provided of course, that members continue to provide the content matter. Members are invited to either continue to submit, in the case of the more or less regular contributors, or to commence contributing articles on any subject of interest to fellow field naturalists.

Members have approved the alteration of the name of the Newsletter to 'The Latrobe Valley Field Naturalist', a title now more suitable to the matter which it contains, and this will be done as soon as the approval of the P.M.G. Department has been obtained.

Members will be interested to know that copies have been sent, on request, to the National Library, at Canberra.

General Meeting, Friday 24th. February 1967:

The first meeting for 1967, to be held at the Yallourn State School, commencing at 7.30 p.m. on Friday the 24th. February, will comprise a talk by Mr. John Landy (yes! the famous John Landy) on 'Insect Protective Mechanisms'. Although this is to be a lecture by an expert entomologist, Mr. Landy has promised that it has been prepared for digestion by the lay enthusiasts and will be illustrated by suitable coloured slides. This will be a worthy start for the new year's programme.

Programme for 1967.

The programme for 1967 is the last page of this Newsletter, and is as positive as it has been possible for the Secretary and others of the Executive to make it. Members will again be grateful for those experts who have undertaken once again to give of their time, knowledge and experience to help in the cause of natural history, and those of us who are anxious to increase our knowledge and therefore our enjoyment.

Excursion Saturday 25th. February 1967: Excursion Secretary, Miss Nancy Rossiter, back with the Club once again after a world jaunt, has provided the following information on the excursion:

The excursion will be a visit to the home of Mr. Courtenay at Yinnar, to see his insect collection. This will take place in the afternoon following a working bee at the Hazelwood Arboretum in the morning, and a picnic lunch there, leaving for Mr. Courtenay's at 1.45 p.m..

The working bee will start at 10 a.m., and plenty of transport should be available for those without cars. The arboretum is full of interest for all gardeners and native plant enthusiasts, and members should take this opportunity to become better acquainted with the project - they will find it a most rewarding experience, especially if they take some part in the care of the trees.

A Note On The Small Tongue Orchid by Mrs. Bon Thompson:

(Cryptostylis leptochila). On the September excursion to Darlamurla, we were shown the leaves of tongue orchids. We went back at the end of September hoping to find the flowers but at the first stop found only leaves - but did find Elbow Orchids, Tall Lobelia and Creeping Goodenia.

At the next stop we were more fortunate and found buds but, after much searching and no flowers, we returned to the car to find one out in bloom. The Small Tongue Orchid is a very unusual orchid - the tongue is uppermost and is a beautiful deep maroon color with black glands in two even rows. The name Cryptostylis means 'hidden style', so we looked for the column. This appears to be a jelly-like mass with a triangular lid on the top. Under the point of the lid is a dark spot - lifting the lid revealed the pollen masses in a 'V' shape which fitted into its underside. When we touched the dark spot the pollen masses detached and we had the sticky dark spot and the pollen masses on our tiny stick.

As we had not exerted any pressure when we touched the flower we wondered if this was part of the pollination. There is a lot of movement in the tongue, and when the bud opens the tongue is slightly bent forward towards the centre of the flower. It takes about half a day for it to get into position where it is pointed right back to display all its beauty. As it matures the short lateral lobes of the tongue come together to hide the centre of the flower and the end of the tongue once more comes forward until it is almost semi-circular.

These are, of course, the observations of a very amateur layman!

----- Bon Thompson -----

The Friendly and Trustful Black & White Fantails by Mrs. Muriel Smith of Trafalgar:

A Few weeks ago, I was attracted by the sound of birds who were upset about something. Suspecting a hawk or cat I went along to investigate and found a Wagtail with three babies on the rail of a fence near the end of the cowyard. The little Mother was in great distress, coaxing, scolding and demonstrating in her endeavours to get them to fly. Constantly on the move - a short flight to the other side of the yard, back and up on the rail again. Mother Wagtail flew in full of advice only to be driven off by Dad who, until now unseen was obviously on guard close by.

From time to time I looked their way and saw that the little Mother had got first one babe and then another to leave the rail and try their wings. They would fly to the ground and then back to the rail, and their little tails would move with an awkward up and down movement more often than from side to side.

The third baby refused to leave the rail.

(Cont'd over...

Some half an hour from the time I first saw them I went down to close a gate, and walked over to them. There he was, sitting on the rail and calmly preening himself and shaking the light misty rain from his feathers. I knew that the adult birds were not afraid of me, but marvelled at how trusting were the little ones.

As the two active ones flitted around my feet I could have put out my hand and touched the little bird on the rail, yet he sat there intent only on making himself beautiful.

Four days later I saw them again around the same spot - all were now very active - their tails had grown and now swung sideways with ease. They were not now so obviously babies, but they had not lost any of their trust in me.

----- Muriel Smith -----

The Lyrebird and the Big Log by T AND T Moretti:

We were unlucky to have to leave the Baw Baw excursion on the Sunday, but decided to make the most of the trip back and to inspect the 'Big Log'. We were surprised to find that if the log had been solid it would have supplied enough wood material for two houses.

We parked by the roadside and set off up the track near an old sawmill site. On the way we saw Lyre-bird mounds and, on arriving at the Log, found that it was very slippery after some overnight rain. I scrambled onto the log as a vantage point to see around, and while I was at the big end a Lyre-bird hopped on the small end and paraded along the log towards me. I left as quietly as possible by sliding down a tree and left the bird in possession of the log. It was probably a hen bird as it was not really shy. (?) However, we were enjoying the wonderful view when a carload of noisy people arrived - the Lyre-bird then walked around the log and off into the scrub.

----- T. & T. Moretti. -----

A reference to *Acacia terminalis* by Mr. Ern Homann:

One of the most beautiful of our acacias, *A. terminalis*, has been flowering most abundantly since the end of January. This member of the wattle family grows into a large and shapely tree. The leaves are feather-like, but much larger and coarser than our common silver or black wattles.

The flowers are cream in colour and borne on the end of the branches in large but loosely arranged bunches. I expect it was this habit of flowering which led to its being named *terminalis*.

This wattle, originally a native of Queensland, has been widely planted. One very fine specimen grows in the garden of Mrs. Purvis on the west side of Moore Street, Moe, near the Hospital Annexe, while another fine one is on the west side of Monash Road, Newborough, not far from the Gunn's Gully intersection.

----- Ern Homann -----

Conservation and the Role of the Natural Resources Conservation
League: By C. Sibley Elliott. 'Victoria's Resources' December 1966 -
February 1967.

'This paper was presented by Mr. Elliott to the Corangamite Regional Convention held Colac Civic Hall, 10. October, 1966.

In recent numbers of 'Victoria's Resources' you will find more than one definition of conservation, but none of these conflicting with the others, and all emphasising the fact that it is not sufficient to think in terms of one particular natural resource - or, indeed in terms of various resources considered individually. True conservation plans for the wise, enduring use of land, water, forests, open spaces, air, rivers and seashores, with due regard to the fauna and flora involved. The attainment of its peak of effectiveness requires a concerted and integrated effort; demands that personal hobby horses be subjugated to the requirements of the overall problem and demands facts as a basis on which to work. There is no place for ideas that will not stand up to critical analysis, and well-intentioned but ill-founded enthusiasm can bring ridicule and disdain instead of the public support necessary for success.

To set our thinking along right lines, I am going to borrow one of the other definitions of conservation. This is - "The maintenance of the natural world in a state of physical and biological balance which promises to serve the foreseeable needs of mankind". You will note that the definition implies utilization, but sustained utilization, to meet man's needs.

Bearing that definition in mind, and relating it to our present day concern, it will have a somewhat salutary effect on our thinking if we consider that the wealth of natural resources in our country, and indeed in every country of the world, one hundred years ago was appreciably greater than it is today, when the needs of a rapidly and steadily increasing population have to be catered for.

Let us remember this and ask ourselves, "What will the position be in another hundred years? Will I have done anything to stop the waste that is whittling away the world's reserves as the need for them increases?

Let us look back far beyond a hundred years to the very early days of the world, when now non-existent plants and animals were engaged in a tremendous struggle for existence, not only against what we commonly term 'natural enemies', but also against catastrophic upheavals and climatic changes.

In that era were laid down the beginnings of some of the resources on which we draw today - coal for example. But the point I want to make is that it was a period of change beyond the control of man, even if he had been armed with the knowledge of today.

By the time modern man had become an established entity the world was old, and much more docile, and presented to him an inheritance rich in natural resources. It is no cause for wonder if man at that time gave no thought to the possible depletion of his treasure trove. It is no cause for wonder if he knew nothing of the finely balanced ecology that had been established, or of the dire consequences of upsetting that balance.

What is a cause for wonder is that present-day man, with highly developed scientific understanding in many fields in addition to that of ecology, can remain so blind or so callously indifferent to the tragic waste that enters so often into his chosen way of life.

I want to refer to predators, and two aspects of their relation to biological balance. We use the word 'predator' quite frequently, applying it to those animals and birds that prey on others. It is also used in the wider sense of 'plunderer' or 'pillager'.

The predatory animal or bird is what it is simply because this is the way in which its species has survived in the struggle for existence. Further in its natural habitat, it is by its very nature one of the important factors in the ecological balance that is so important to man.

Man, the predator in the wider sense, can claim no such justification for his actions, which must be put down to either greed, or wilful refusal to accept the knowledge that now exists relating to the consequences of his pillaging.

This can be illustrated by examples drawn from other countries, and it is for you to think about our own Australian resources in the light of these experiences. The first example comes from Africa. To the hunters of the world the African lion has long presented a tempting challenge to skill and courage. The fact that he is a predator has been but an added reason for destroying him. With such game in mind no self-respecting hunter would consider shooting the attractive harmless little deer which also live in some lion country, providing an important source of food for the lions. So it was that, in one particular area, the lions became heavily reduced in numbers while the deer, with so many of their natural enemies removed, multiplied prolifically. The attractive, harmless little deer, now so plentiful that it could no longer survive on the food supply in its normal haunts, roamed in search of food, and became pests, ravaging farm lands. Man had upset the balance of nature.

The second example appeared in an English provincial paper last January, and the facts in it are indisputable, the journalistic style of the report serving to impress them on the mind more deeply than a bare statement of the facts would do. The report deals with the serious direct and indirect results of the over-fishing of anchovies off the coast of Peru. I quote..."The anchovy is back, in the cold Pacific off the shores of Peru, and the big Peruvian fishmeal industry has heaved a momentary sigh of relief. The fish are back, but for how long?

Although shoals are sighted and boats regularly bring back as much as they can to fill the never-satisfied maw of the processing plants, there is no longer the apparently silver stream that there used to be. That was before the intoxication of the fishmeal bonanza went to everyone's head and the industry, after just ten years of existence, pushed Peru into the position of the world's leading fishing nation with a total of 8,700,000 tons of fish caught in 1964, 98% of which was anchovy for the fishmeal plants.

At present it is only too obvious that even the prolific anchovy has its limit - and the limit has now been reached.

Warning voices against over-fishing have been raised during the past few years, but they were always overruled by other opinions based on current economic pressures than on provision for the future or on scientific fact. The truth is that it is difficult to establish with certainty the relative importance of all the factors leading to the appearance and disappearance of the anchovy at different seasons. Last year, however, no one could have failed to read the signs. For the first time the Peruvian Government decreed a close season on anchovy fishing for August, the time when the fish generally disappear into deeper waters for spawning. At the end of this period there was still no sign of the shoals and the fishing boats searched fruitlessly for another month. Only towards the end of October were there indications of a return of the anchovy and even then, only in moderate quantities, often of small young fish which should have been - but were not - thrown back. The situation has not noticeably improved since.

Those who have suffered most from the lack of the anchovy have been the pelicans and the guano birds, which breed on the Peruvian offshore islands and live almost exclusively off this tiny fish. Ten years ago there was an estimated 35 million seabirds on the coast of Peru; now the estimate is only three million. Last August and September Lima fish markets were invaded by thousands of starving pelicans, while other birds emigrated or just died at sea. The number of birds has been declining gradually over recent years and it has been calculated that some 18 million starved to death during the anchovy dearth in 1965. Apart from the tragedy to the birds themselves, their loss has badly affected another Peruvian industry, that of the guano fertilizer produced by the birds and later collected for use by small farmers in all parts of the country. This fertilizer is excellent and cheap and can be replaced only by much more expensive synthetic imports. In 1955 the birds produced 336,000 tons of guano, while in 1965 the figure was down to 154,000 tons.

The National Fertilizer Corporation has already stated that the 1966 crop of guano is likely to be only 55,000 tons, and that the product will have to be strictly rationed. To make up the quantity of fertilizer needed Peru will have to spend some £4m. of foreign exchange. In succeeding years this figure will tend to rise unless even larger sums are invested in fertilizer manufacture. To protect the birds' nesting grounds and to safeguard their food supplies there is a regulation that no vessel may fish within a five-mile radius of the more important islands and a three-mile radius of lesser ones, but patrolling is inadequate, and the regulation is in effect a dead letter. The latest development announced by the president of the National Committee for the Protection of Natural Resources, is that an International conference on this theme will be organised in Peru this year and that the subject of the vanishing anchovy will be on the agenda."

Once more man, in this case, by his greed, has upset the balance of nature to his own detriment.

The papers presented at the Colac Convention dealt with the conservation of water, conservation of soil, conservation of forests, and conservation of fish and wild-life. All of these, in addition to their own individual importance, have a bearing on an established ecological balance. Misuse of any one of them can arise from either ignorance or greed, or both combined.

It is the hope of those who organised the Convention that all who attended it would go away 'Conservation Minded'. Those who did might well remember some very apt words spoken by the late President Kennedy of the U.S.A. the year before his assassination: "In the work of conservation, time should be made our friend, not our adversary. Actions deferred are frequently opportunities lost, and in terms of financial outlay, dollars invested today will yield great benefits in the years to come." It is safe to say that President Kennedy never heard of the Natural Resources League of Victoria, but in that statement he unwittingly epitomised the role of the League. One can turn to the Memorandum of Association of the League and find some 37 objectives listed. One can refer to its activities since it took over from the Forests Campaign in 1951, thereby becoming responsible for an interest in other natural resources as well as forests, and one will find quite an impressive record of achievement. All of these can be seen for the reading in publications that you can obtain for the asking. They are worth reading, but having read them you will still lack a definition of the most important feature of its role.

This, I suggest, is ceaseless striving, by all means that it can command, to enlist individuals, societies and organisations in this State to the ranks of those determined to prevent waste and misuse of our national resources, and to assure that no opportunity of taking preventive measures should be lost because of action deferred. Conventions may well become one of the most important means by which general interest in conservation can be aroused, but they can also be a complete failure if those who attend them experience but a passing wave of enthusiasm, and then lapse into disinterest.

Whether the Corangamite Regional Convention will go on record as being a success or a failure is, partly and largely in the hands of those who attended.

----- C. Sibley Elliot -----

A Few Diuris: by Mrs. F. Gladstone of Beechworth:

'Diuris' means 'two-tails' and refers to the long double-tails that generally hang down from the quaint diuris flowers unique to Australia. These grow in N.E. Victoria. Most of us have noticed the 'Golden Moths' diuris, often found in large numbers among grasses on roadsides or in paddocks. They seem to prefer soft canary-yellow and with a large flat golden labellum, and two wide-spreading petals, with one hooked over the centre of the flower (and held parallel under the labellum are the two tails), they look like a swarm of dainty golden moths flickering about the grass. Biuris (two-tail), pedunculata (stalked), is the name of this lovely Australian blossom.

An early Spring diuris is the Leopard Orchid (*D. maculata* (spotted)). It is up to 11 inches high, and a brown spotted on orange colour distinguishes its flowers, often four or five on one brown stem. Petals stalked which make it alert with two pricked 'ears' blotched on back with irregular brown spots. The labellum has three-lobed appearance, the centre

one higher, like a saddle shape with two raised lines down the centre. It grows in bush and in rocky clefts, also in bush paddocks and on roadsides and is a favourite of children.

Often growing with the Leopard Orchids is one of a paler primrose Diuris palachila; with spade-shaped labellum, which is quite distinct from the three-lobed labellum of the Leopard Orchid. Sometimes it is found that the colours vary and make identification of an individual stem difficult, but the labellum of each diuris gives a clue to its identity, even the colour may sometimes vary.

A lovely purple shade with very long 'tails' is the purple Diuris punctata, which is greatly prized as one of our most beautiful orchids. It grows tall, with two long green leaves at the base, in swampy country usually and has four or five on one green, stout stem. Petals are heliotrope-purple, two of them like ears and one broad spreading in the centre, with the labellum flaring above the two green channelled long tails (often crossed), like a tiny purple apron.

In November a very stout and conspicuously handsome diuris grows up on a robust green stem. This is Diuris sulphurea, the Tiger Orchid, so-called by the children, as the sulphur yellow has two distinct spots of brown almost like two brown eyes. Here should be marked the recurved top hooded petal (dorsal sepal it should be called correctly, I think), and on the labellum, which is three-lobed yellow, are two brown blotches near the tip - one on each side.

This has two stalked petals, one on each side, and the 'stalks' are brown. The two 'tails' are longer than the labellum, and are brownish with sometimes crossed, but most often parallel position below and behind the flower. The whole appearance is alert yet remote, like a real wild creature. As Douglas Stewart wrote in His poem 'Mahoney's Mountain':

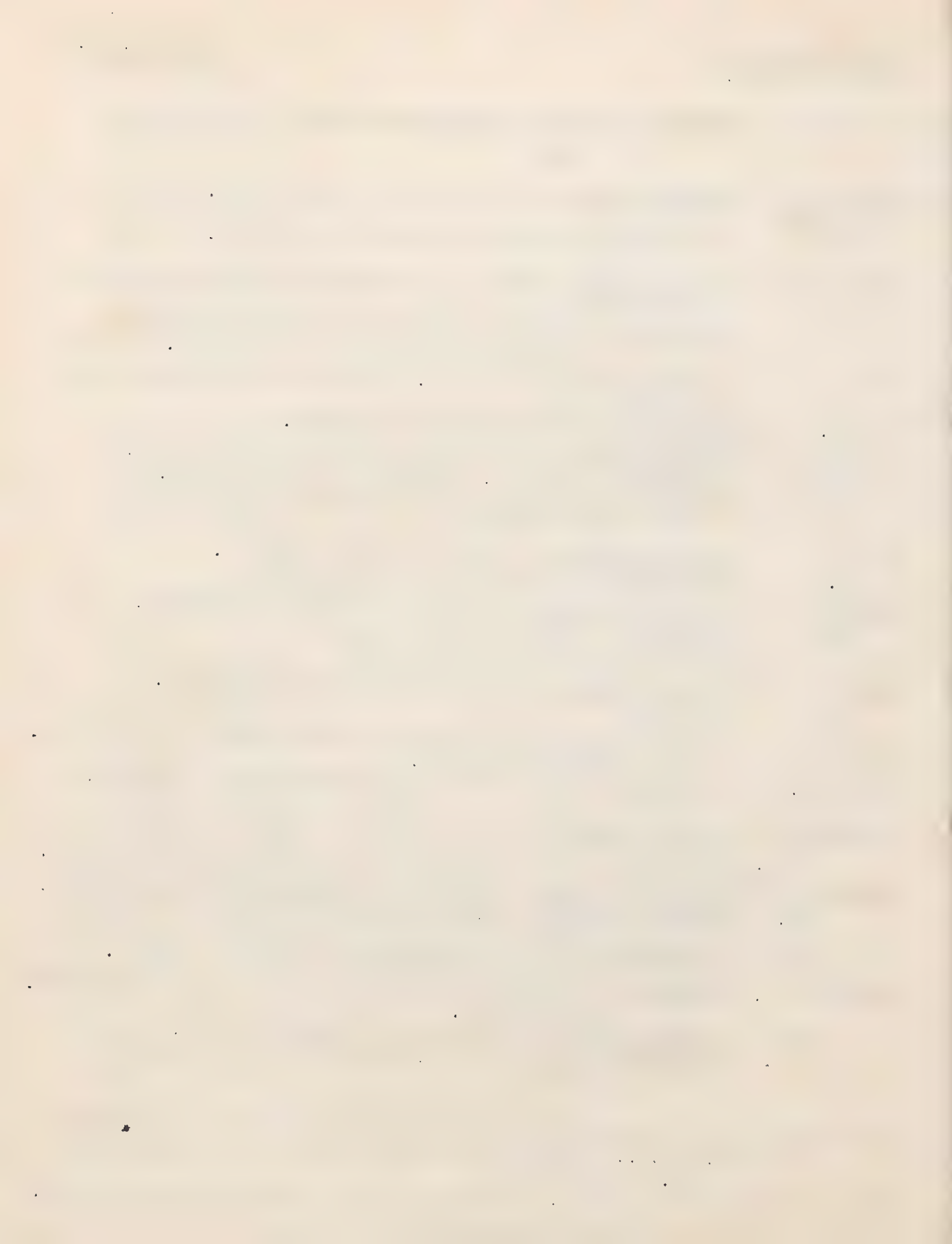
"Nothing but the huge grey silence, the trees and - look,
There where the mountain breaks on its granite peak,
The double-tailed orchid, O like some fairy-tale fox,
Whistled from Earth by a wilder call than ours,
Pricks up its yellow ears and stares through the mist."

(F. Gladstone)

Programme of Meetings and Excursions For
1967.

- January 27. General Meeting: A Screening of Nature Films.
January 28th.
29/30th. Long Week*end Excursion to the Baw Baw Plateau.
- February 24. General Meeting: Talk by Mr. John Landy: "Insect Protective Mechanisms".
" 25. Excursion: Morning, working Bee at Hazelwood Arboretum.
Afternoon, insects at the home of Mr. Courtenay.
- March 31. General Meeting: Talk by Mr. Peter Turner, "Elementary Biology".
- April 1. Excursion, to be arranged by Mr. Turner.
- April 28. General Meeting: Talk by Mrs. Ellen Lyndon: "Fungi".
29. Excursion: Leader Dr. McLennan. to South Cascade.
30. Excursion to Traralgon South Nature Reserve and Morwell National Park.
- May 26. General Meeting: Talk by Mr. King: "Nature".
27. Excursion to Darlimurla: Leader Mr. King.
- June 23. General Meeting: Illustrated talk "Building Stones".
24. Excursion. Welshpool Quarry:
(Speaker and Leader to be advised)
- July 28. General Meeting: Talk by Dr. Brian Smith "Shells".
29. Excursion: To a beach for field work on Shells.
- August 25. General Meeting: Screening of suitable natural history films, including birdlife.
26. Excursion: Stony Creek area - Birdwatching - Leader Mr. F. E. Jones.
- September 22. General Meeting: Talk by Mr. F.J.C. Rogers: "Acacias".
23. Excursion: To the Blackwarry Scenic Road led by Mr. Rogers.
- October 13. General Meeting: Talk by Mr. Lightbody: "Bird Photography".
27. General Meeting: Dr. L.H. Smith: "Some Aspects on National Parks".
28. Excursion: To some potential Reserves in our district.
- November 4/5. Excursion to Wilson's Promontory: Leader Miss Jean Galbraith.
"Wildflowers".
24. General Meeting: Miss Ashton: "Aquatic Plants".
25. Excursion: To the Pools On Anderson's Track: Leader Miss Ashton.

All Meetings are, of course, held at the Yallourn State School, and commence at 7.30 p.m.. Particulars may be obtained from the Secretary, Mr. S. Belgraver.
Annual General Meeting on 31st. March, prior to the ordinary General Meeting.



Notice of Annual General Meeting.

Notice is given that the Annual General Meeting of the Latrobe Valley Field Naturalists Club will be held at the Yallourn State School at 7.30 p.m. on Friday 31st March 1967.

Business of the Meeting will be as follows:

1. To present the Annual Report of the President, Mr. Ern Homann.
2. To present the Treasurer's Report, by Mr. E. McElroy.
3. To elect officers to the vacancies of President, one vice-President, and a Treasurer.
4. Any other business of which due notice has been given.

E. Homann.
(President).

.....
Nomination Form.

Date.....

I a financial member of the L.V.F.N.C.

hereby nominate for the position of

..... and I,

the person nominated, agree to carry out the duties of the position if
elected thereto.

Signature of Proposer

Signature of Secunder.....

Signature of Person Nominated.

(To be handed or posted to the Secretary prior to the date of the Annual
General Meeting)

----- LATROBE VALLEY FIELD NATURALISTS CLUB -----

Office Bearers:

President: Mr. E. Homann, 84 Hennessey Street, Moe.

Senior Vice-President: Mr. J. Peterson, 43 Barry Street, Morwell.

Vice-Presidents: Messrs. F.E. Jones and G.T. Scanlan.

Treasurer: Mr. E. McElroy, 35 Latrobe Street, Morwell.

Assistant Treasurer: Mrs. F. Kinniburgh, Elgin Street, Morwell.

Excursion Secretary: Miss N. Rossiter, Railway Avenue, Yallourn.

Assistant Excursion Secretary: Mrs. L. Padfield, 42 Strzeleckie Rd, Yallourn.

Publicity Officer: Mrs. Bon Thompson, Traralgon South.

Editor: G.T. Scanlan, c/o L.V.C. Hospital, Yallourn.

Hon. Secretary: Mr. S. Belgraver, 179 Lloyd Street, Moe.

Objects Of The Club:

1. To promote the study, enjoyment and conservation of nature;
2. To encourage an interest in the various aspects of natural history;
3. To hold regular meetings and arrange for suitable speakers;
4. To organise excursions or field days for study purposes.

Meetings of the Club:

General Meetings of the Club are held on the 4th. Friday of each month at the Yallourn State School, commencing at 7.30 p.m...

Visitors are always welcome.

Excursions:

Excursions of the Club are in the nature of field days for the purpose of studying some aspect of natural history in the field.

Particulars of meetings and excursions are published in the monthly newsletter.

Subscriptions.

The annual subscription, which includes the copy of the monthly Newsletter, is 10/- for an individual, 1/- for juniors, and 15/- for a family.

This Newsletter:

Is intended to provide members with information regarding meetings, excursions etc., and also to instruct and to entertain. It is a Club effort, and is dependent upon members for its content matter.

Contributions are invited and should be addressed to the Honorary Editor, (Mr. G.T. Scanlan, c/o Latrobe Valley Community Hospital, Yallourn.

THE LATROBE VALLEY NATURALIST.


ISSUE NO. 39.

MARCH 1967.

Official Monthly Publication
of the
Latrobe Valley Field Naturalists Club.

Whose Motto Is

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Registered at the General Post Office Melbourne for
transmission by Post as a
Periodical.

AN APPRECIATION .

This issue of the "Latrobe Valley Naturalist" has been printed on and by the Club's own duplicator, a new machine generously donated by Mr. R.N. (Bob) Auchterlonie, of "Glenaveril", McDonald's Track, East Narracan.

Recurring difficulties in printing the Club paper, formerly known as the "Monthly Newsletter", induced Mr. Auchterlonie to make an offer which was gratefully accepted and should enable a higher standard of printing to be effected, the regular issue of the paper, and the printing of additional matter in the way of supplements and, in general, increase the value of the "L.V. Naturalist" to members.

The Duplicator is the well-known Gestetner 310, electrically operated and for use with stencils. Cost - \$300 plus or minus some few dollars.

Mr. Auchterlonie is, of course, a well-known member, of long standing of the Latrobe Valley Field Naturalists Club. He has been lecturer and leader of meetings and excursions respectively - he is a very competent field botanist and has prepared a 'key' to the Eucalypts, in particular those to be seen within easy distance of his home - he has been and is an active worker in connection with the Hazelwood Arboretum and an inspiration to others thereby - possessed of 'green fingers' as is evidenced by his well grown and interesting garden of Australian plants (trees and shrubs)-

The Editor is particularly grateful !

Editor:

George T. Scanlan.
c/o L.V.C. Hospital,
YALLOURN. VICT.

Dear Fellow Field Naturalists,

General Meeting and Annual General Meeting:

The Annual General Meeting and the ordinary monthly General Meeting will be held on Friday 31st. March at the Primary School, Yallourn, commencing at 7.30 p.m.. The speaker will be Mr. Peter Turner, of Sale, and he will introduce the subject: "Water and Plants" - an aspect of plant biology.

The business of the Annual meeting will take precedence and will consist of the following:

1. Presentation of the President's Annual Report;
2. Presentation of the Treasurer's Report;
3. Declaration of officers to fill vacancies;
4. Any other business.

Excursion Saturday 1st. April: The Excursion Secretary advises that Mr. Peter Turner will lead the excursion on the Saturday following the General meetings to the southern shores of Lake Wellington in order to describe the aquatic plants to be found there, and their special adaptations to the environment. Here there are extensive swamps formed, it is said, by the deposition of sediment, and the vegetation is related to the environment.

Miss Nancy Rossiter asks that members meet on the north side of Lake Guthridge on the Saturday morning at 10 o'clock. Those needing transport or more information about the excursion should first get in touch with their usual contacts, and then ring Miss Rossiter.

Executive Meeting Friday the 3rd. March: Some of the matters discussed at the meeting which was held at the home of Mr. & Mrs. Ted McElroy, at Morwell were:

Donation of Funds for a Duplicator: This is also referred to elsewhere in this issue. Discussion centred on the aspect of whether or not Club printing was sufficient to justify possession of an expensive machine. It was decided that circumstances did justify the purchase, and Mr. Bob Auchterlonie's offer to donate sufficient money was accepted with gratitude.

Change of name - Newsletter: It will be seen from the outer cover that the name of this little paper is now the "Latrobe Valley Naturalist." The cover is of a temporary nature only, and Mrs. K. Jacobson, the artist, has in hand the redesigning of the cover to enable new stencils to be obtained. Approval of the change by the Assistant Director, Postal Services Division of the P.M.G. Department, has been obtained to what is probably a much more appropriate title than 'newsletter'

Contributors in particular, and members in general will be interested to know that a copy of each issue is now required to be sent to the

National Library, Canberra, commencing with this issue, following a perusal of two earlier issues by the National Librarian.

Contributions to the "Naturalist". Contributions are required to keep the Club paper alive, interesting and worthwhile. Members are invited to contribute articles of any length, on any subject within the wide compass of the term 'natural history or science'. Authoritative papers on aspects of natural history, particularly relating to Gippsland, will be considered for separate printing. These could include survey lists of flora and/or fauna of special areas - it is intended to print, for instance, a list of plants, not necessarily exhaustive, to be found in the Traralgon South Reserve, and perhaps at Darlimurla.

Annual Subscriptions: These are now due, and members are asked to make payment to the Treasurer, Mr. E. McElroy, or his assistant, Mrs. F. Kinniburgh. Copies of the "Latrobe Valley Naturalist" can only be sent to financial members of the Club - this is a requirement for registration - and in order to retain the benefits of registration, subscriptions must be paid as they become due.

Publicity: Publicity for the Club is necessary, not for monetary reasons, but in order that our aims and objectives may be known to as many as possible. Mrs. Bon Thompson, of Traralgon South, the Club's publicity Officer, is to be congratulated on her successes with the newspapers in the area. The Club is grateful also to the proprietors of the various newspapers for the coverage they have given and are giving to Club activities.

Australian Content in Shire Gardens: The Shire of Morwell, in its Councillors and Officers, has shown keen and intelligent interest in preservation, conservation and in growing Australian native plants (shrubs and trees) wherever practicable. It is believed that the proportion of Australian plants to the total planted is in the region of 65%. The wisdom, and resulting beauty of this is already apparent, and an excellent example has been made for the townspeople and the successors of the present Councillors, which it is hoped will be followed.

Hazelwood Arboretum: A small number of members of the Club continue to carry out essential weeding and other tasks at the Arboretum. It will be necessary to replant a large number of trees during this year, and more helpers will be required.

Visitors to Club Meetings and Outings: It is pleasant to see so many visitors at Club meetings and excursions, many of them members of other Clubs in the Valley or elsewhere. They are always very welcome.

Alteration of Meeting Night - Executive Committee: It has been decided to hold future meetings of the Executive Committee on the Monday following the monthly general meeting. The next meeting will be held at the home of Mr. & Mrs. Jim Peterson, 14 Barry Street, Morwell, at 7.30 p.m. Friday 3rd. April 1967.

A RARE VISITOR TO VICTORIA: Bird Note by Miss Nancy Rossiter.

Great excitement has been caused in ornithological circles by the discovery of the rare Turquoise Parrot nesting in ranges in Northern Victoria.

These parrots are described by both Cayley and Gould as probably nearly extinct and have only been sighted in Victoria four times in this century.

On a bird-watching expedition in the late afternoon of October 30th. last, Mr. Roy Wheeler, the well-known ornithologist, and the writer sighted a small yellow and blue parrot perched in a dead gum tree. It was identified immediately by Mr. Wheeler as the rare Turquoise Parrot. After perching only long enough for recognition it was off and no more was seen of it that evening.

Next morning we were back at the same spot as soon as possible and in about ten minutes after arrival saw two of these parrots feeding on the ground. A closer and longer viewing was obtained and identification confirmed.

Mr. Wheeler had to return to Melbourne that day, and left me to make further observations with the object of discovering whether they were nesting in the area or merely birds of passage. Over the next eleven days I made frequent sightings of the parrots, usually of the male, sometimes of a male and female, and once of two pairs - however, no nests were discovered.

I was fascinated by the beautiful colouring of the male bird with his brilliant blue head and wings, bright yellow breast and olive green back. The female only seemed to have a suggestion of blue about the bill, and was not seen often enough for a detailed observation of the plumage except that her breast was also a bright yellow.

Red patch on the wing as shown by Cayley didn't seem to be always visible. Just after alighting or ruffling of the feathers it was very noticeable, but gradually disappeared under other feathers when there was no movement of the wings. Recorded as eating only seeds, it was startling to see the male devour in quick succession - two dry red-box leaves and a cape-weed leaf.

A report on the parrots was sent to Mr. Wheeler and the next act in the drama opened with the arrival of Mr. Len Robinson (the parrot expert) and a friend who hoped to photograph the birds. Taken to the parrot area early in the morning, they returned at lunch-time very jubilant, with the news that they had seen ten males, some numbers of females, and had discovered their nests - one with eggs, one with egg-shells, and one with baby birds. They spent the rest of that day setting up hides and cameras and next morning left at 5 a.m., not returning till 6 p.m.. They said they had got some splendid shots, especially of the male birds and also of nests and young. Further shots are to be taken of the alter throughout their development.

And so the 1966 appearance of the Turquoise Parrot in Northern Victoria has been noted and its status as a bona fide resident established and recorded.

TREASURES OF THE BUSH. BY Mrs. F. Gladstone, Beechworth, Vict.

One of the blisses of the early Spring is to find a small cluster of Blue Caladenias (*Caladenia caerulea*). Sky-blue blossoms, daintily held about four inches high on a slender stem, they blossom on rocky hillsides, often grouped here and there in cleft or glade, from the bottom slopes to the summit, under the shrubs, and often with the pink caladenias nearby or in drifts of rock fern.

The stem of the Blue Caladenias is wiry and purplish-brown, and just one grows on each stem. The petals are outspread in a platform with one behind the column, and the labellum is on a claw, broad, three-lobed with recurved centre with two rows of yellow calli to tip.

The whole effect is of the essence of early Spring's pastel tonings and daintiness: of the freshness and newness of springing blossoms after Winter's rain in the bush.

'Blue Fairies' (*Caladenia deformis*) is often found in August and September too, and is very like the former, but has a green stem more stout in size, and has a purple callus, in four or five crowded rows on the labellum.

'Pink Fingers' *Caladenia* (*C. carnea*) (*Carnea* meaning flesh-coloured) is the pink caladenia often seen in early Spring among the hills. Usually dwarf and slender it has one, and sometimes two or three blossoms on one stem. The four pink and dainty petals and sepals are spread out like fingers of a hand. The labellum is curved and one petal is slightly bent over it. The distinguishing feature of this little flower is the transverse linear red markings on labellum and on column. The scattered glimpses of these little flowers, varying from deep pink to almost white, is very pretty, lifting their tiny blossoms above the dry leaves of the bush floor.

Later in the season we can find Caladenia angustata, under the timber. It carries several flowers and is called Musky Caladenia by the musky perfume about its white flowers. The petals are often tipped pink and pink on outside of petals, and on labellum and hooded dorsal sepal leaning over it.

Caladenia cucullata, our hooded caladenia, is open in October - November, and has several poised blossoms on its slender six inch stem. The sepal at the back of the column is strongly inarched forming a concave hood over the column - flowers are 'bronzy' on back of petals and white to palest pink above. Dark Purple labellum...

Caladenia dilatata, the Fringed Spider Orchid is of a different type of caladenia for its segments extend to long filaments ending in points. The labellum is the conspicuous show-point of the flower, for it has a rich deep purple tip curved under, and crowded purple calli down its centre. The sides are green and serrated or fringed and upturned, giving the flower a poised look. Often in groups of five or more in the flickering bush-lit native setting, this orchid has all the aloof, remote atmosphere of the silent outback.

It is a heart-catching experience to see the Spider Orchid when away from your home hills. At once you are back in the bush near silver-grey granite boulders, among the straight dark-stemmed pines (*Callitris* ...) and the blue-white trunks of hill-gums with the outflung graceful branches throwing leaf-shadows which the breathing wind moves now revealing, now concealing, the Spider Orchids.

Here, another *Caladenia* grows, flowering in September, the 'red' Spider (*Caladenia patersonii*) which is a tall, larger blossom, and the stem and oblong leaf at base are covered with fair hair. This blossom has a red-maroon look, the labellum crimson-purple and not fringed at each side, but covered with four rows of dotted red-coloured calli. The tapered spider-like filiformed petals quaintly poised, are often three or four inches long, and in the native setting with the bush-lit artistry of camouflage, merge into their surroundings, and to detect one in its exquisite uphold perfection, is a rich joy - from the Hand of God.

..... F. Gladstone

"CHILDREN AND FOOLS ..." by Miss Jean Galbraith.

A correction of an item in the December issue.

You all know the end of the title saying above ! I can't claim to be a child, so qualified for the other category when I said (December Newsletter) that the fruits of all our ballarts (*Exocarpos*) are green. I had not then seen the fully ripe fruits of *E. stricta*.

I have now seen them, through the kindness of Mr. & Mrs. Thompson.

The fruits are like shining black heads sitting on fruitstalks like pearls, for the "brownish-red" stalks I described in December had become translucent pearly white by January.

I still think Pale-fruit Ballart is not a good name. The stalk is pale, but the fruit is black, and 'Jet-fruit Ballart' would be more appropriate.

..... Jean Galbraith

LIZARD PRODUCTION AT BORONIA. by Mr. Reg Stephens.

Whilst digging in some new ground about three weeks ago, I found six white eggs about the size of the smallest of birds' eggs. Not having seen anything like them in my 46 years in the Latrobe Valley I transferred them to a large tin with some moist soil and awaited results. After about two weeks there was still no apparent change, and I felt guilty of having interfered with nature and of having terminated some young lives.

Curiosity overcame my patience and I decided to take a risk on one them. The soft shell was carefully pierced whereupon a tiny lizard promptly emerged and took cover under a gum leaf. So I dampened the ground around him so that he wouldn't perish from dehydration and covered his hideout with a bag. He was still there all next day, and quite lively when disturbed, but he had gone on day '3'.

Today (February 23rd) I found that the other five eggs had hatched and there were five very lively little lizards about 2" long. Not being acquainted with the ingredients of a lizard's diet I felt that I could not imprison them any longer, so they were liberated in the vegetable garden where many adults of the same variety have been seen. My wife wonders if the juveniles are already united with their parents.

But please tell me, dear fellow field naturalists, how many of you, like myself, would NOT have recognised these $\frac{3}{8}$ " long white soft-shelled eggs for what they were?

....

Reg. Stephens.

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SOMETHING ABOUT HARVESTMEN. by Mrs. Ellen Lyndon.

There is a rather interesting little animal living in some of the gardens hereabouts that I have not met with in other localities. These are the spider-like creatures known as Harvestmen. They are not really spiders at all, but belong to the mites (Order Acari). Arachnologists do not include them in popular handbooks on spiders and it is often difficult to find out anything about them.

Spiders have two parts, the head-chest bearing the legs is divided by a narrow waist from the body, whereas most of the other arachnids have the abdomen and cephalothorax joined across their whole breadth. In harvestmen the abdomen is divided into six segments and the two eyes are placed back to back on a bump or tubercle of varying shape. There are no spinning organs such as spiders have. Although Harvestmen can squeeze themselves very flat to hide in narrow spaces, they produce a surprising turn of speed when they rise on the four pairs of long walking legs which are seven-jointed like those of spiders.

The Victorian Naturalist of November 1946 published an article dealing with Harvestmen written by Mr. R.A. Dunn. (I well remember certain field excursions with the F.N.C.V. when the Duns, father and son, would peel off sheets of bark and lovingly examine the most horrific tarantulas, or Huntsman). Mr Dunn's paper deals in detail with the major differences between Harvestmen and spiders, and he remarks that, because of the very long and slender legs they are invariably confused with the 'Daddy Longlegs' spider. They are nocturnal creatures and large ones can be found during daylight hours resting flat behind the doors of sheds, while hordes of the smaller ones hide in empty flowerpots, under tins and fallen leaves about the garden. They range in size from miniatures to big ones with the longest of the eight legs up to 2" in length, the oval bodies in the centre of these like swollen grains of wheat. They like damp conditions and cannot live without water. Their food list includes caterpillars, centipedes, spiders either in the live state or dead, and they are not averse to cannibalism. In emergency the legs may be cast off and new ones grown somewhat, I gather, after the manner of the little skinks that shed their tails. Eggs, up to 20 in number, are laid in holes in the ground or under stones, and the young are replicas of their parents except in color and size. They may moult as many as nine times before maturity is reached.

It seems we have here an animal that is not only interesting and handsome in itself, but is distinctly beneficial to the home gardener, for all manner of caterpillars, at least, are high on the list of garden pests this dry season. Our Harvestmen are surely worthy of further study by some enthusiastic young naturalist. Specimens forwarded on request !

.... Ellen Lyndon

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INSECTS: A reference to a talk by Mr. John Landy by the Editor.

Mr. John Landy, entomologist, talked to members at the general meeting on Friday the 25th. February on the subject of; "Protective Mechanisms in Insects", providing a necessarily brief but fascinating glimpse into the world of insects . His talk was illustrated by slides of a particularly high standard, and it is probable that at least some of the members present were inspired to resolve at least to attempt a study of some branch of this vast subject.

Defence mechanisms operated in insects in ways of great diversity and complexity and were devised, primarily, for survival, of the individual and thereby, of the species. Some of the methods were a matter of instinctive behaviour, such as where the insects had taken to living beneath the ground, under stones or the bark of trees, or where the insects actually bored into living or dead timbers. Some insects, because of their form in the stages of metamorphism (the cycles from the egg to the adult) adopted different patterns of defence. Other insects, as a result of adaptation to environment and conditions, had acquired such characteristics as a hard outer body which resisted or repelled the onslaughts of predatory animals; while in some others, colouration and markings provided camouflage and a measure of protection.

The latter method was illustrated by a butterfly which in repose had all the appearance of a leaf, even to the apparently caterpillar nibbled notches in the wings, and the veining of a leaf.

'Freezing', by which an insect remained completely still in an attempt to avoid recognition was another method while somewhat similar was the habit common to many of the beetles to feign death, even to the extent of lying on the back with legs pathetically pointing skywards.

The viewing by a number of members of the comprehensive collection at the home of Mr. J.H. Courtenay at Hazelwood on the Saturday whereby insects referred to by Mr. Landy could be seen in actual specimens (although deceased), of beetles, moths and butterflies was of real value because of the introductory talk the night before.

.... G.T.S.

THE BAW BAW PLATEAU:

Excursion Australia Day Weekend.- 28th. - 30th. January 1967. Report by Miss Betty Kemp.

Warned of a warm day and a stiff climb to the top, the more cautious members left early for the Alpine Lodge we had engaged at Mt. Baw Baw Village, arriving before lunch in beautiful weather. This was a combined excursion with 20 - 30 members of the Botany Group of the Field Naturalists Club of Victoria, who had taken another lodge and also shared ours. More hardy members camped out, notably Miss Jean Galbraith who was able to be with us for Saturday and Sunday morning, and led the excursions on those days.

Flowers were abundant right from the back door, early discoveries just across the home streamlet being patches of pale blue Sky Lilies (*Herpolirion novae zelandiae*) peeping from the grass, of *Trachymene humilis* like little pink pincushions without pins surrounded by flat pale green leaves, and of tiny mauve-white Fan Flowers (*Scaevola hookerii*) - all flat to the ground.

There were clumps of pretty blue *Veronica nivea* with cosmos-like foliage, shapely but prickly *Richea continentis* in creamy-white flower; Mountain Pepper (*Drymis xarpophila*) with its pretty circular leaf arrangement and very hot to the tongue; a very small-leaved Heath (*Epacris brevifolia*); pale pink *Euphrasia* and *Epilobium* with its pink flowers at the end of a long thin pedicel. Here also were patches of green Leek Orchids (*Prasophyllum alpinum*) with here and there the pretty White Leek Orchid (*P. suttonii*) with mauve markings.

Everywhere were long-stemmed wild Violets (*Viola hederacea*), and the tiny white Alyssum-like Woodruff (*Asperula Gunnii*) hugging the ground. Amongst these and continuing into the tree line (all Snow Gums - *E. pauciflora*) were many large white Silver Daisies (*Celmisia longifolia*); pink Grass Trigger-plants (*stylidium graminifolium*); large golden Billy Buttons (*Craspedia uniflora*); and the white daisies of the shrub *Olearia phlogopappa*, var. *subrepandra*.

Up the valley, along the ski pole line, there were small streams and pools, some dry, with Sphagnum and other Mosses and plenty of Snow Grass (*Poa Australis*). *Richea*, Sky Lilies, Billy Buttons abounded, and many large yellow Daisies on single stalks (*Senecia pectinata*), and golden Everlastings. Again Silver Daisies and Trigger-plants were abundant amongst the trees.

Beyond the home run, we climbed through a rough patch of bush where the tiny leaves of the wild Violet and the geranium-like leaves of Pennywort (*Hydrocotyle pendunculata*) made soddy green carpets, from which arose the white flowers of *Oxalis lactea* (like Sourgrass), and *Libertia pulchella*, its delicate white cups rayed out from a single stem. Climbing still, over streams and ground spongy with moss and Sphagnum, we came upon large patches of mauve Veined Sun Orchids (*Thelymitra venosa*), and the striped white Mountain Gentian (*Gentianella montana*) mainly in bud, and Pineapple Grass (*Astelia*). There were the red strap-like leaves of the Sundew (*Drosera arcturi*); a few flowers and many leaves of the Bird Orchid (*Chiloglottis cornuta*); and many Trigger-plants, *Epilobium*, Silver Daisies and *Olearia phlogopappa*. A pretty sight everywhere were the *Callistemon Sieberi* covered with soft yellow brushes and many seed boxes, and *Orites lancifolia* with its cream hair-like

flowers indicative of the *Grevillea* family to which it belongs. But a sad sight was the mass of twisted dead limbs of the snow gums killed in the 1939 bushfires which devastated the mountain range. These still rose above the tops of the new generation of snow gums in twisted series, but in due course will be hidden.

Further on, in an alpine meadow, we passed clear pools containing tadpoles, and found the Alpine Water Fern (*Blechnum perna-marina*); a Club Moss with large clubs (*Lycopodium scariosum*), the recumbent sprawling Mountain Plum Pine (*Pedacarpus aplina*) with tiny pink male cones; and the Marsh Marigold (*Caltha intraloba*) with its peculiar lobed leaves, which is found under the overhang of the melting snow and flowers before the snow melts. *Baeckea gunniana* was in pink bud, promising a good show of fragrant tea-tree-like white flowers; while Mountain Heath (*Epacris paludosa*) was still in white flower. Near the summit we found the Bush Pea (*Pultenea muellerii*), low-growing, with small yellow pea-shaped flowers, and the pretty little *Pimelea alpina* with tiny pink and white flowers massed at the end of the stem.

On the summit (at last) where it was comparatively flat, the open spaces between the Snow Gums and flat light brown rocks were carpeted with Trigger-plants; Silver Daisies, and Billy Buttons. The carpet continued down the north side with black granite rock showing through the grassy slopes interspersed with Snow Gums. Here also was the shrub *Helichrysum secundiflorum* with small white many-petalled daisy flowers and secondary leaves at the flower branchlets.

Next morning, Sunday, dawned cold, grey and sightless; but by 9 o'clock we were on our way down the road toward the turntable. The mist was lovely on the purple-brown burrs of the Bidgee-widgee plant and on the tiny *Prosthranthera microphylla* with its equally tiny white flowers. As we wandered down the road examining the flora on either side, we recognised many of our friends of the upper valleys - the tiny Woodruff, wild Violets, Pennywort, Fan Flower, *Pultenea muellerii* and *Helichrysum secundiflorum*. Here also were the Andean Carraway (*Oreomyrrhis oripoda* ?) with attractive purple seeds; the low spreading Raspwort (*Halogaris*); *Cotula* with finished yellow flowers; Beard Heath (*Leucopogon gelidus*) with small red berries; *Senecio vellioides* in bud with long blue-green leaves; and *Senecio linearifolius* with many heads of yellow daisy flowers and large serrated leaves. *Coprosma nitida*, looking like a Cretaceous without prickles, was in flower but inconspicuous, the female flowers very small with two long styles, and the male flowers larger with four long antlers. Very conspicuous throughout the bush were the mauve-white flowers of the Mint Bush (*Prosthranthera cuneata*) whose cuneiform leaves are narrower at the base. Also seen were the Mother Shield Fern, *Pittosporum bicolor* with green berry fruit and leaves green on top and white beneath, and the Baw Baw Berry (*Wittsteinia vacciniacea*) that is found only on Baw Baw, Lake Mountain and Donna Buang.

Lower down the road we noticed a difference in the flora. Amongst the Snow Gums there were now appearing *Eucalyptus dalrympleana* (Mountain Gum) with round blue-green leaves; Silver Wattles (*Acacia dealbata*); and the coppery foliage of young Myrtle Beches (*Nothofagus cunninghamii*); while the Mint Bush was taller, almost tree size. The mist was still heavy in the tree tops and looking up one could see, dimly, the gaunt white arms of dead giants killed in the '39 fires, raised as if in supplication against a repetition of that holocaust. Here were *Libertia pulchella* and *Olearia phlogopappa* again, the large berries of the Tasman Flax-lily (*Dianella tasmanica*); *Cop-*

rosma hirtella with the hard rough leaves and greenish-yellow flowers with six large anthers in the centre of the leaf clusters; Senecio vollioides crammed with flowers; Elderberry Panax (Tieghomopanax sambucifolius) with ash-like leaves, and pink-flowered Epilobium confertifolium. By a streamlet we found Hard Water Fern (Blechnum procerum), Bay Water Fern (B. fluviale) showing the fertile fronds finer and separate, and Oxalis lactea again.

Turning off the road, we climbed an old jeep track back up the mountain, finding Bird Orchids up the path both side and centre. Here were more and taller Beeches, Sassafras (Atherosperma moschatum) with its serrated leaves, and young Silvertops (E. Sieberiana). A rather tired party finally and gratefully reached the top road again and thanked Miss Galbraith for her help and guidance, as she was leaving us after lunch.

After lunch, the mist having lifted to reveal dull clouds, a group hiked up the home valley to the right summit, making further discoveries on the way. On a rock in the valley we found the tiny and rare creeping alpine Wild Cherry (Exocarpus nana) with red berries, and Lichen (Pixie Cups) with fruit pale green trumpets showing pale green powder (spores) inside. Also seen were Coprosma repens, a Lagenophora, and the Stalked Water-Milfoil (Myriophyllum pendunculatum). At the turn to the right summit we came upon a large wombat hole - suddenly the writer fell into it ... - and shortly after had the excitement of finding a white Trigger-plant in the midst of many pink ones under the trees. Trampling carpets of wild Violet and Pennywort leaves, we climbed onto large grey rocks, on top of which was discovered a small frog - how it got there we could not fathom. Returning by a short cut (straight down) to the valley, some of us then set off over our previous day's route to the left summit, finding a wonderful patch of Sundews in a wide bay of a boggy stream and patches of Pineapple Grass with flowers and red oval fruit. Two More heaths were seen - Epacris serpyllifolia with tiny pointed leaves; and E. petrophila with tiny blunt leaves. A pretty sight was two mosses together - Polytrichum juniperinum with light brown fruits, surrounded by a fine furry moss (Dicronella). On the way back, high up, we had the pleasure of watching a number of Flame Robins on the edge of the forest.

Night brought thunder, lightning and rain, and a wonderful view from the lookout across the Latrobe Valley where the lights of the towns shined dimly. Floodlit Hazelwood Power Station stood out well. Lightning played along the clouds over the Strzeleckie hills and regularly shot to earth in a straight line behind Hazelwood, while we ourselves were bathed in bright light as thunder rolled and crashed behind us. Here was another side of Nature - wonderful and terrible in its might.

Next morning, with the promise of another fine day, a group hiked five miles north across Mt. St. Philloc to Mustering Flats, climbing 150' higher than Baw Baw. Flora was somewhat the same as on Baw Baw but there were carpets of the prostrate Heath (Pontachondra pumila) studded with red berries. They came upon three White-lipped Snakes which (white-lipped?) made off.

Altogether 130 species of plants were identified during the weekend. In addition, some members of the Club (led by Mr. Frank Jones) and of the Victorian Ornithological Research Group, engaged in gathering data for research

into the migratory habits of Flame Robins, and several mist nets were up in the home valley.

Everyone agreed that it was a very enjoyable and worthwhile weekend, shared with our Melbourne confreres, and we are looking forward to meeting them again for the South Cascade excursion in April.

..... B. Kemp

SPHAGNUM MOSS IN THE LOWLANDS.

by Mrs. Bon Thompson.

Recently we visited a private property at Traralgon South to investigate the number of swamp heath plants (*Springelia incarnata*) growing there. We found the plants, which will commence flowering in the Autumn, and to our delight we also found areas of sphagnum moss and umbrella fern (*Glaichenia microphylla*).

There have been pockets of sphagnum moss found in the lowlands in recent years, but, of course, the large areas are in alpine regions. This moss was in areas surrounding natural soaks. There were many little plants in the moss - the swamp isotome (*Isotome fluviatilis*); brooklime (*Gratiola peruviana*); the little blue lobelia (*Lobelia alata*); swamp mazus (*Mazus pumilo*) similar to little monkey flowers; two varieties of myriophyllum (*Myriophyllum verrucosum* and *pendunculata*) small plants with tiny flowers similar to raspwort.

In this area, although not actually in the moss, grows *Helichrysum rosmarinifolium*, another plant usually growing in alpine areas. We also found this plant growing at Yallourn North. Miss Galbraith has kindly identified these plants.

Not far away is an area of land that has been cleared and here we found the creeping raspwort (*Haloragis micranthra*), and a very tiny sundew (*Drosera pygmaea*). It is only about half an inch across, the leaves are stalked from the centre to make a ring, in the centre is a clump of fine white hairs or stipules, and from this come the very fine flower stalks about one inch high, with tiny red buds and white flowers, one to each stalk.

..... Bon Thompson

BOOKS: New and Reprinted - by the Editor.

"What Bird Is That ?" by Neville W. Cayley. \$5.75. 344 pp.

This valuable work on Australian birds was first published in 1931 and has gone through numerous reprintings to the present edition, which has been revised and enlarged by A.H. Chisholm, K.A. Hindwood and A.R. McGill, and published this year (1967).

In this bird book, the bird species are arranged under four main divisions, instead of in chapters: Forest-frequenting birds; Birds of the Heathlands and Open Country; Birds of Lakes, Streams and Swamps; and Birds of the Ocean and Shore. These divisions have been further subdivided, and the book is a most convenient and ready reference - probably invaluable for both the expert ornithologist and the interested amateur.

"A Handlist of the Birds Of Victoria" by W. Roy Wheeler. (1967)

Mr. Wheeler is a former President of the Royal Australasian Ornithologists Union, and Secretary of the Bird Observers Club of Victoria, and this handlist fills a longfelt want in relation to Victorian birds. It records all the species of birds which are known to have been seen and described in Victoria. As a handlist it is not intended as a means of identification, but would be a valuable addition to "What Bird is That".

"A Field-list of the Birds Of Canberra and District" (1967) 30c.

Published by the A.C.T. Branch of the Royal Australasian Ornithologists Union. This is essentially a field book, and is designed to provide ready reference in graphic form to the birds of the A.C.T.

"A Continent in Danger" by Vincent Serventy. \$5.65 (1966) 240pp.

Vincent has published several works, all authoritative, on various themes of a natural history nature, but principally connected with native fauna. This book is one of the 'Survival' books, and would appear to be very competently written and produced.

Mr. Serventy has produced a book which can be enjoyed as well as pointing a message. The foreword by Colin Willock concludes with: "I am thrilled with Vin Serventy's book, not only because it is a good natural history book full of guts as well as of information, but because I think it can do a great deal to awaken people to the need to work fast to prevent this particular lost world from becoming lost for ever."

CLUB.

Are invited and may be sent to the Editor at the above address.

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LATROBE VALLEY
NATURALIST.



LATROBE VALLEY FIELD NATURALISTS' CLUB

THE LATROBE VALLEY NATURALIST.ISSUE NO. 40.
APRIL 1967.

Dear Fellow Field Naturalists,

Meeting and Excursion Notes from the Excursion Secretary, Miss.
Nancy Rossiter:

General Meeting Friday 28th. April: The talk on this night will be by Mrs. Ellen Lyndon, of Leongatha and her subject will be "Fungi". There is a great variety of these lowly plants, and this is a most appropriate time of year for information on, at least, those of the fungi which might safely be gathered and eaten.

Excursion: On the week-end of April 29th. - 30th. the Club will be acting as host to the Field Naturalist Club of Victoria, and it is hoped that as many of our members as possible will attend the outings arranged for Saturday 29th. and Sunday 30th..

On the Saturday, at South Cascade, fungi will be the subject for study, following upon Mrs. Lyndon's talk on Friday evening. Members are asked to meet at Parker's Corner, $2\frac{1}{4}$ miles beyond Trillick on the Thomson Valley Road, at 9.30 a.m..

The Melbourne field naturalists will be met by representatives of the L.V.F.N.C. at Moe and piloted by them to South Cascade later in the day.

On Sunday 30th. the Hazelwood Arboretum is to be visited in the morning and it is suggested that our members be there at about 10 a.m.. The party will leave the Arboretum at approximately 11.30 a.m. and proceed to the Martin Walker Reserve for lunch. This reserve is on the corner of Middle Creek Road and Gilbert's Track.

In the afternoon the party is to visit the new National Park at Foster's Gully, Yinnar, after which our visitors will leave on their return journey to Melbourne.

.... N. RossiterConferring of Life Membership Certificates:

A Special General Meeting of members of the Club, which took the form of a social evening, was held at the Yallourn State School on Friday 7th. April for the purpose of presenting two members of the Club, Miss Jean Galbraith and Mr. Bob Auchterlonie with Life Membership Certificates, for outstanding service to the Club and, thereby, to the cause of natural history education, preservation, and conservation.

The President, Mr. E. Homann, in making the presentations, outlined the association of each with the Club, and referred to the special contributions which they had made. The Certificates were designed by Mrs. K. Jakobson, and incorporated the Club emblem - the Flying Duck Orchid - and its motto: "Protect and Enjoy".

Notes of the Executive Meeting:

The meeting of the Executive was held at the home of Mr. & Mrs. Jim Peterson on the night of April 3rd., and the following is a summary of some of the matters discussed: -

Key to the Ferns: The only part of this to now come from the author, Mr. Peter Turner is the preface, and this useful guide to the Victorian ferns is awaited with interest.

Photoflora 1968: It was stated that popular Photoflora, at which during the last showing, some local members of the L.V.F.N.C. and also the Warragul Club had excellent coloured slides of flora accepted and shown, will probably be conducted during February to April 1968. This advance advice will enable those members intending to submit slides to do almost a full year cycle of 'blooming' photography.

Educational Programme: The programme for classes in natural history which was planned to commence this year had to be deferred because of an inability to obtain the services of a suitable teacher for the essential preliminary classes in biology. However, investigations and enquiries are still being made, and if and when a teacher is available members will be advised. The interest expressed in the proposed classes and the specialised classes to follow was considerable, and was a further indication of the growing interest in these matters.

Annual Subscriptions: There is still a number of subscriptions due and outstanding, and members are asked to become financial as soon as possible. The Club is not urgently in need of the funds involved, but is required to comply with the 'Naturalist' registration conditions, that it be posted and supplied only to those members who are financial. The amount to be paid, if you are in arrears, can be ascertained by referring to the rates set out on the inside of the back cover.

The Hazelwood Arboretum: A great deal of unpublicized work is still going on in connection with the Arboretum on the top road side of the Hazelwood Pondage. As stated in the last 'Naturalist' it is hoped to make a planting on Saturday 6th. May of 'frost-hardy' trees, and more willing workers are required to make this successful, as well as for other maintenance work. Members have carried out a survey of what trees remain growing in the area, and although losses since the original planting have been heavy, the scheme still holds a great deal of promise. Many of the trees, particularly probably in the acacias, hakeas and some other varieties, are making good progress. It is suggested that members who have not seen much of what has been happening there might find a visit - not necessarily to work - very interesting.

This paper and contributions: Some long dead person is credited with having said something to the effect that 'the poor are always with us' - a statement true but without the meaning which it formerly had - and it can be said with truth that the Editor consistently pleads for contributions to the Latrobe Valley Naturalist. However, the plea is not one which comes from selfish motives - it is felt that some good comes from its publication each month - and the intention is to help fulfil the objects for which the members have formed themselves into a Club. Please help to spread the message: 'Protect and Enjoy - Preservation and Conservation !

The Annual General Meeting: The business of the Annual General Meeting of members preceded that of the normal monthly meeting, and the proceedings are briefly summarised as follows: -

The chairman for the meeting was Mr. Ern Homann, President of the Club, and re-elected for the ensuing year.

Increase in membership: There was a gratifying increase in membership during the year.

Guest Speakers and Excursion Leaders: Reference was made to the generous response of specialist naturalists to requests to lecture to members on a variety of matters of natural history interests. The Club has been most fortunate in the calibre of its speakers and leaders.

Officers of the Club: The President made reference to the work formed in the interests of the Club and of the members by the officers: including the Hon. Secretary, Mr. Simon Belgraver; The Excursion Secretary, Miss Jean Rossiter and her assistant, Mrs. L. Padfield, who carried out the quite extensive work associated with arranging excursions etc.; Mr. Reg. Stephens, former Publicity Officer and his successor, Mrs. Bon Thompson; the Editor of this magazine and officers of the Executive Committee.

Car Stickers: Special reference was made to the work of Miss Betty Kemp in the distribution of the Car Stickers, designed by Mrs. K. Jacobson. A total of 2,300 stickers had already been sold and distributed to field naturalist and similar clubs throughout Australia. These were for the purpose of recognizing fellow field naturalists by wearing the sticker on the rear window of cars and other vehicles, and the experiment had been wonderfully successful.

Creation of Reserves: Mr. Homann stressed that the primary and most important function of the Club was to encourage the appropriate authorities to reserve suitable areas as fauna and flora reserves, and to assist other organisations to this end. Some of the more recent creations were:-

Foster's Gully, south of Yinnar, where was to be found the rare Ti Orchid.

Boola-Boola Reserve, about north of Tyers, where a wildflower reserve is now in being.

Whitelaw's Track, about south of Yallourn.

And in progress: Darlimurla and the South Cascades area. Darlimurla is an area in which assistance has been given by members of this Club in flora and fauna surveys, and South Cascade area is facing the threat of being closed completely for the purposes of water conservation by utilizing the waters of the Thomson River. Representations were made to the Parliamentary Works Committee on behalf of the Club by Mr. Jim Peterson.

The Sale Common and Gellion's Run: The Sale Field Naturalists Club and other organizations are being supported in efforts to reserve at least parts of these areas.

LAKE VICTORIA: Report of the Excursion to the southern shores of Lake Victoria on Saturday 1st. April: by Miss Betty Kemp.

A rainy night and a dismal cloudy morning lowered hopes for another fine day for the excursion to the southern shores of Lake Victoria, but Mother Nature again favoured us, the weather steadily improving en route.

The first port of call was at Sale's Lake Guthridge - man-made sanctuary for many water birds which appeared quite used to human beings. As our car travelled around the lake verge to the meeting place, a handsome Eastern Swamp Hen, with blue breast and red beak and pate, casually moved to one side to let us pass. Up to 19 species of birds had been seen here, among them Black Swans, Pelicans, three species of Cormorant (Little Black, Black and Little Pied), Coots, Dusky Moor Hens, Eastern Swamp Hens, Ducks (Grey Teal, Chestnut Crested Teal, Black, Blue Bill, Musk and Hard Head). Much nesting takes place by the flood creek alongside the lake, and here Mr. Peter Turner, excursion leader from Sale, mentioned melodious lunch-time concerts by Reed Warblers.

Rainbow Trout, European Carp up to 12" and EELS have been found in the Lake.

Water plants included Red Azolla (*Azolla filiculoides*) that floats in dense red patches on the surface; Tall Spike-rush (*Eleocharis sphacelata*); and Hel-grass (*Vallisneria spiralis*), a submerged plant which has spread considerably in the lake and which has an interesting method of pollination, the male and female flowers being on separate plants. In Miss Galbraith's simple and clear descriptions: "The female flowers on spirally coiled stalks, which straighten to allow the flowers to float on the surface; when the short stalked male flowers, becoming detached from the plant, are floating near to pollinate them. The stalks then recoil while the fruit matures, and straighten to bring it to the surface when ripe."

The next stop was by Sale Common where there was much water, 3' deep in parts, and many birds - White Egrets, Yellow-billed and Royal (black billed) Spoonbills, all three species of Cormorants, Marsh Terns (with thousands of nests), and the Ducks and Swans seen on Lake Guthridge. Grebes nest here and Cattle Egrets have been seen, but not the Little Egrets. There is also a large Ibis rookery with both White and Straw-necked Ibis, and Glossy Ibis have been known to come here from drought-stricken northern Australia.

Continuing our journey, we paused at the near end of Loch Sport road. Here the land was flat and sandy with low shrubs alongside the road suited to withstand dry conditions. On many the leaves were tiny (to protect against loss of moisture), hard or spined. There were many Heaths - Pink Beard Heath (*Leucopogon ericoides*); Common Heath (*Epacris impressa*) not yet flowering; Daphne Heath (*Brachyloma daphnoides*) which has a very fragrant honey scent; a Myrtle Heath - the Common Fringe-Myrtle (*Calytrix tetragona*) with aromatic leaves and finished flowers showing long fine hairs coming from the calyx. Also noted were the autumn flowering Bossia heterophylla with flattened stems and orange-yellow pea flowers, somewhat like the Genista; Shrubby Platysace (*Platysace lanceolata*); and a member of the Parsley family, *Aanthia pilosa* with 3 - 5 lobed hairy leaves (mainly 3 lobed with

(Excursion Notes Contin'd.)

with the middle lobe larger and itself usually 3 lobed. There was Spike Wattle (*Acacia oxycedrus*) already in bud with young catkins growing from the base of the sharp-pointed stiff green leaves, and the Shrubby Sheoke (*Casuarina distyla*) with many tiny oblong cones.

Moving on along the road, now bordered with Tea-tree and many fine banksias, we turned off to the right along Campbell's Causeway to Trig Point on the Ninety Mile Beach for lunch. Our path crossed Lake Reeve mud flats partly covered with water and carpeted with colourful succulents which we had no time to indentify as we splashed and skidded through the mud and puddles of the causeway. Blue sky, green sea, white surf and golden sand made a perfect picture, offset by the dull green of the Tea-tree and pale grey of the Salt-bush with its peculiar woolly stick-like foliage, admirably suited to withstand both dry and salty conditions.

Lunch over, we returned across the causeway and continued on to a salt marsh on the other side of Loch Sport. Here our erudite leader, with the road for a blackboard, explained the process of osmosis whereby water is attracted through a membrane (such as a plant or cell wall) from a solution of low concentration to one of high concentration - salt in the case of salt marsh plants. Thus a plant will store up a lot of salt in order to keep the water in.

The salt marsh was a low open area surrounded by tall Tea-tree, with a salt-caked creek winding through undulating carpets of red and green - a pretty scene with the blue sky reflected in the water. As would be expected in such a salty environment, many of the plants were succulents with fleshy leaves swollen with water salty to the taste. Everywhere were the bright green Beaded Glasswort (*Selicornie australis*) with smooth jointed fleshy stems like strings of beads; the Seablite (*Suaeda maritima*) with many small red sausage-like leaves; and the prostrate Rounded Noonflower (*Mesembryanthemum australe*) whose cylindrical leaves ranged from green to scarlet. Salt-grass grew up in long fronds among the succulents. Here also we found Brookweed (*Samolus repens*) whose small pink flowers have tiny scales between the petals; Swamp-weed (*Scleria radicans*) with fleshy spoon-shaped leaves and which has a Fan-flower type pale pink flower; and Common Sea-heath (*Frankenia pauciflora*) with tiny leaves spreading mat-like and small palest pink flowers. Further away from the creek grew taller shrubs - Showy Cassinia (*Cassinia spectabilis*) with large aromatic leaves growing very closely up and around the woolly stems topped by a fuzzy mass of tiny pale brown flowers (finished?): Swamp Dock with long spikes of yellow flowers, and a fresh looking aromatic-leaved *Thryptomene*.

Onward to the Lakes National Park on Sperm Whale Head, glimpsing more mysterious mud flats and water surrounded by tall bush and seeing many Banksias, old and young. We travelled through the park to Pt. Wilson on the south shore of Lake Victoria, noting here more succulents (Noon Flower); a small grass-leaved white Daisy (*Brachycoma graminifolium*); and a Trefoil with yellow pea flowers. After a welcome cuppa we were joined by Mr. F.C.W. Barton, Park Ranger, who had led us on a previous excursion to the Park.

Eventually we had to make a start on the long way home, after Mr. Peter Turner was suitably thanked on members' behalf by Mr. Thompson.

AUTUMN LEAVES: by Mr. Bob Auchterlonie.

"That time of year thou mayst in me behold
When yellow leaves, or none, or few, do hang
Upon those boughs which shake against the cold,
Bare ruin'd choirs, where late the sweet birds sang ..."

Thus observed Shakespeare, though alas ! his own enjoyment of that particular time must have been both premature and fleeting if, as we are told, he departed this world in his fifty-third year. But perhaps man's expectation of life was shorter in the sixteenth century than it is today.

Be that as it may, the actual season for not only yellow leaves, but scarlet and crimson ones, and every conceivable blending of these colours is again at hand, and a few comments on how it all comes about may not be out of place.

First of all, it must be stated that this annual autumn display is produced entirely by deciduous trees and shrubs introduced from the Northern Hemisphere, and forms no part of Nature's plan for Australia. Our native trees and shrubs, with a few minor exceptions are evergreens, and growth proceeds throughout our comparatively mild winters. In Europe and North America, it is a different story. In the severe winter climates of those regions, only trees with specially adapted leaves, such as conifers, retain their foliage over winter. There would be no purpose, and only risk of limb breakage, in broad-leaved trees doing so, so these latter deal with the situation by discarding their leaves in the Autumn or the 'fall', as our American friends would say, and go through the winter with bare limbs; but before doing so, they turn on that display of coloured leaves which we associate with the autumn.

Although surprisingly few people are aware of it, chlorophyll is one of the most important substances on this earth, for without it plants could not grow, and all animal life, including man, would starve. Chlorophyll plays a vital part in the plant's most important activity, which we know as photo-synthesis, or the converting of carbon dioxide from the air firstly into sugars, which are ultimately transformed into starch, fats, cellulose etc., which form the great bulk of the plant's make-up. It is green in colour, is formed in the leaves in the presence of light, and the more favourable the conditions of light, temperature, moisture and soil nutrients, the more chlorophyll is formed, hence the darker green of the leaf, and the more vigorous the plant's growth. Chlorophyll is used up by the plant practically as soon as it is produced, it is not stored up for any length of time, consequently, if its production is held up through unfavourable conditions of temperature, moisture, or any other cause, the plant's growth must slow down and cease.

In addition to chlorophyll, plants may contain in varying quantities, one, or both of two other groups of substances which have a bearing on leaf colour. The first of these are the carotenoids, an almost ever-present group of plant pigments, yellow in colour. They occur in all parts

Autumn Leaves (Cont'd)

of the plant, leaves, fruits, yellow flowers, seeds and bark. During active growth, the quantity of carotenoids in plant leaves is so very much less than chlorophyll that their presence is completely obliterated or masked by the green colour of the latter.

The other group of substances, anthocyanins, are red, purple and blue pigments, which are also ever-present in the sap of certain plants. Like the carotenoids, these occur in much lesser quantity than chlorophyll, and are normally similarly masked. They are responsible for these colours in flowers, and fruits such as apples, plums and grapes. Nutrient deficiencies, and excessive or insufficient soil moisture can cause excessive anthocyanin production.

The full purpose of these two latter groups is not known. It has been suggested that they may play a minor role in the process of photosynthesis. But it seems likely that their most important function is to impart the red, yellow or blue colours to the flowers, in order to attract insects and ensure pollination, and to render fruits attractive, and so encourage the dispersal of their seeds.

The stage is now set for the autumn colour carnival. Shortening daylight hours, longer nights, lower temperatures, signal the approach of the trees' winter rest period. Chlorophyll production begins to slacken, slowly at first, then with quickening tempo as the season advances, until it is being used up faster than it is being produced. Soon the stage is reached when there is no longer sufficient to mask the ever-present carotenoids and anthocyanins, and the latter start to show up through the green, gradually to become the dominant colours for a brief gay period prior to eventual fall. Leaves of trees such as Poplars, Willows, Tulip Tree, English Maple, low or lacking in anthocyanin, become yellow only, whilst others such as Beech, Japanese and Canadian Maples, Rhus etc., rich in this substance, take on the darker reds and crimson. Others, such as the English Oak, and the Plane Tree, low in both substances, assume a more neutral russet tone.

The process can usually be seen in reverse in Spring. From budburst until they are fully grown, the leaves of those species rich in anthocyanins show the red colouring until such time as chlorophyll production gets under way in quantity sufficient to submerge it.

A season of normal rainfall is conducive to good leaf colouring. Dry autumns with hot northerly winds produce poor colours, scorching, and premature fall. Finally, fallen leaves still have a purpose to fulfil. They are a valuable source of humus, so necessary for maintaining the soil in good physical condition and preventing erosion. Don't burn them!

..... Bob Auchterlonie

BIRD-BANDING PROJECT: by F.E. Jones.

A Study of the Movements of Honey-eaters in Relation to the flowering of Native Plants.

In accordance with current bird-banding policy requiring banders to specialize in a specific project, the above project has been submitted to, and subsequently approved by the C.S.I.R.O. Division of Wildlife Research.

The objectives of the project are to ascertain:-

- a) the concentration and movement of Honey-eaters as affected by the flowering of native plants:(mainly Eucalypts and Banksias).
- b) the degree to which various species are dependent upon nectar from these plants.
- c) whether the same individual birds return to the same areas in successive seasons.
- d) which species remain in an area regardless of the availability of nectar.
- e) whether return of birds is fortuitous or instinctive.

The methods being used to achieve these aims are as follows:-

1. Regular mist netting and banding in selected areas, whether the main nectar producing plants are flowering or not.
2. Investigation of any localities where any plant is flowering heavily, and banding in these areas if practicable. With some banding in non-flowering areas for comparison.
3. Banding of all nestlings found in the banding areas.

The project is to be of 10 years duration, and we hope to band approximately 1,000 birds in a year.

Since we started bird-banding in 1965 we have banded over 2,000 birds, and of these 995 have been Honey-eaters of 18 species, so we have only to continue our banding over the proposed period, paying particular attention to Honey-eaters, and we should be able to follow the project through to a successful conclusion.

There are several obvious plant/bird relationships, such as New-Holland Honey-eaters and Hill Banksia (*B. spinulosa*); Wattle-birds and Coastal Banksia (*B. integrifolia*), but with the Eucalypts and their erratic flowering habits the position is not so clear. It has been noticed that in the Cowarr district the flowering of the Red Box (*E. polyanthemos*) every second year coincides with the influx of White-naped Honey-eaters and the Crescent Honey-eaters, and an increase in the numbers of other Honey-eaters, but as the amount of nectar varies according to seasonal conditions the number of birds can be expected to fluctuate also.

The factors that govern the flowering of Eucalypts are often obscure, and if the birds can anticipate a heavy nectar yield in a particular area and travel from afar to the land of plenty, then their instincts provide better judgement than humans have of these things.

(Bird-banding Project- Cont'd)

Our bird-banding in recent weeks has been of rather a negative nature, mostly concerned with proving that few Honey-eaters occur in certain Eucalypt areas while the trees are not flowering, although quite a few birds were netted around water in the dry late Summer and early Autumn periods. This method however, resulted in many birds which we are not banding now being caught, and we are looking forward to the time when we can put our nets among the Autumn flowering Eucalypts. Red Ironbark (*E. sideroxylon*) has begun to flower and looks promising, and should be followed up this year by the Red Box.

We should not forget that many of the aims of our project could be achieved by observation alone, but for a real insight into the reasons for bird movements and the variation in the birdlife in our study areas, many birds must be banded and some of them retrapped over a number of years.

.... F.E. Jones

BUTTERFLY MIGRATION STUDY IN AUSTRALIA: by Ellen Lyndon.

It may not be generally known that there is a butterfly marking scheme in progress at the present time somewhat similar in operation to that of the banding of the birds. A tiny printed sticker is folded over the edge of the upper wing - it in no way impedes the flight of the butterfly wearing providing that it has been correctly applied, and that the insect is sufficiently large and robust to carry the label. A little experimentation soon clears up this point and enables the operator to judge at a glance whether the butterfly is suitable for marking.

The study of long distance butterfly migration originated from the Australian Museum in Sydney, and particulars may be obtained by writing to the Curator of Insects there. The stickers bear a serial number and a 'please return to Sydney Museum'. They are white and can be seen plainly on a butterfly in flight. Anyone seeing a marked butterfly could help by netting it and sending in the number given on the tag together with details of place and date of capture. If the insect is dead just forward the tag, or rather the wing with the tag on.

Two lines of investigation are being used:

1. Observations and recording of flight direction, both of individuals and of massed flights;
2. Marking and release of specimens, in particular of the Wanderer (sometimes called the Monarch), and the Caper White (not the Cabbage White). However, any species may be marked and particulars recorded on the forms supplied, in fact, the more marked and released the better. In N.S.W. school teachers have found this a practical exercise for children, and we have in our club a teacher so co-operating.

Absolute accuracy is necessary in this work, and Dr. Common's little handbook is recommended as a guide. Co-operators are asked not to.

(Butterfly Migration Study Cont'd).

give flowery accounts of their work to the press, magazines etc., but I asked and was granted permission to send in a note to this journal. There may be other members who might like to assist. Observation of butterfly species seen on club outings could add interest to our field days and improve our knowledge of lovely things that often pass by unnoticed.

..... E. Lyndon

AN OUTING WITH THE BARRIER (Broken Hill) FIELD NATURALISTS: by
Mrs. Enid Newnham of Sale...

In June of 1966, while on a holiday at Broken Hill, my husband and I were invited by the Vice-President of the Barrier Field Naturalists Club (Mr. Geoffrey Lithgow B.Sc.) to join one of their excursions. On the following Sunday morning therefore, at the Post Office corner in Argent Street, we joined the party consisting of some thirty or forty passengers in a bus, and a number of cars ready to move off. We travelled at first in a northerly direction, passing the site of the old Mt. Gipps Station from which, in 1883, boundary rider Charles Rasp discovered the fabulous mineral wealth of Broken Hill.

About ten miles further on was the homestead of Windalpa Station and, having obtained permission, we travelled several miles on through the station property until we reached a creek bed - or, rather, a dry water course as they are called in this country. On either side were two bare rocky hills called 'The Paps', and here we stopped, those interested in mineralogy searching the area for black tourmaline, which was to be found as loose crystals in the bed of the water course, or embedded still in the rock matrix. Tourmaline is a complicated silicate containing boron and aluminium, (and several other metals). It has striated (i.e., channelled or grooved) crystals.

After a picnic lunch the party divided into two groups - Botany and Geology - and we joined the latter. Mr. J.E. Baker explained the natural features of the area, and the interesting rock specimens as we wandered along the watercourse. We were diverted, after a time, to inspect the nest of an eagle, and to see a rare species of Eucalyptus (E. gillie), the seeds of which had been collected when some 30 years before, Albert Morris, the botanist, had begun his noted plantations around Broken Hill, in order to prevent the overwhelming of the city by the prevalent duststorms. Both of these interesting matters were at the top of one of the hills, and the first easy grade enabled us to discuss and examine the unusual things to be seen, including the 'dead finish' Wattle (A. tetragonophylla) and the various species of Chenopodiaceae.

Climbing upward we passed an abandoned mine shaft, a timber shored hole of unknown depth. A little over half way to the top the grade grew steeper, and the loose stones moved uncomfortably under the feet, bounding down the slope behind us, and reminding me, at least, that the bottom was a long way down, and the open mine shaft also below.

(Broken Hill F.N.C. Cont'd)

A little further on and the going was like climbing a steep cliff. Hastily I burdened my husband with the camera and collecting bag as my two hands and feet just didn't seem enough to hang on with. Then it was that we reached the rare species of Eucalyptus, but by then I had lost all interest in the subject of botany - it took all my powers of concentration to hang on. Still further up we reached a cave, but it and the eagle's nest no longer held any interest for me.

Others of the party had become very helpful with advice as to where to step, what to hold on to, while others virtually hauled me up over the last ghastly crag. The striking view from the top was admired before commencing the descent on the other side of the hill. This was not anywhere so steep and the watercourse was soon reached. Unbelievably, to me, some of the more hardy members of the party now again set off to climb another hill, in order to view a fault.

Later, over a refreshing cup of tea, members of the party gathered to show and discuss their mineral and botanical 'finds', and the cameras clicked as the enthusiasts obtained records of the outing.

This was a memorable experience !

.... E. Newnham

A BOOK REVIEW : by Miss Jean Galbraith.

'Insects and Their Habits' (John Child); illustrated by Margaret Senior) Longmans Australian Nature Series: 69 cents.

This latest arrival in the series edited by Thistle Harris is intended for older children, but has much of interest for adults also. The Nature Series, now with 13 titles, was described to me this week by a teacher as "A teacher's dream - just what the doctor ordered !", and apparently both children and adults enjoy and learn from these books on the branch of natural history they find most interesting. For many this is the world of insects.

The author's first book in the series 'Insects' was for younger readers and described insects' growth, structure and behaviour. The new booklet describes seven of the largest insect orders and tells something of the habits of their members under such headings as "How insects obtain air ... oxygen ... food ... water "; "How they see, hear, and smell," we are given glimpses of a realm as absorbing and wonderful as any in nature, and helped to learn more by our own observation and reading. The book, like others in the series, is illustrated in colour. It includes a list of books for further reading and a list of suggested 'things to do'.

.... Jean Galbraith

LATROBE VALLEY FIELD NATURALISTS

CLUB.

Office-Bearers 1967 - 1968.

President: Mr. E. Homann, 84 Hennessey Street, Moe.
Vice-Presidents: Messrs. J. Peterson, F.E. Jones and G.T. Scanlan.
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Hon. Editor: Mr. G.T. Scanlan, c/o L.V.C. Hospital, Yallourn.

Hon. Secretary: Mr. S. Belgraver, 179 Lloyd Street, Moe.

Meetings:

General Meetings of Members are held on the fourth Friday of each month at the Yallourn State School, commencing at 7.30 p.m.. A programme of proceedings may be obtained from the Secretary.

Excursions:

These are in the nature of field days and are held, usually, on the day following the monthly general meeting. Some excursions take the form of 'camp-outs'. Again, the programme should be referred to. Visitors are always welcome at meetings and excursions.

Subscriptions:

The Annual subscriptions, which become due at the end of February in each year, are as follows;-

For Adults:	\$1.00
Juniors:	.10
Families:	\$1.50

The Latrobe Valley Naturalist:

This is the official publication of the Club, and is registered at the G.P.O. Melbourne for transmission by post as a periodical. Registration is a privilege, but requires that the magazine may be posted only to members who have paid an annual subscription, as above.

Contributions are invited from members of the Club on any aspect of natural history. Articles submitted may be of any length (within reason), and mss. may be written or typed, and may include drawings. They should be sent to:

G.T. Scanlan,
c/o Latrobe Valley Community Hospital,
YALLOURN. VICT.



LATROBE VALLEY NATURALIST.


ISSUE NO. 41.

MAY 1967.

PROTECT

AND

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LATROBE VALLEY FIELD NATURALISTS' CLUB

Editorial:

General Meeting for May 1967: Members are asked to take special note of the change of date for the May Meeting. This is now to be held on Friday the 19th. May, at the usual place of meeting, the Yallourn State School at 7.30 p.m.... The speaker will be Sir Robert Blackwood, and his subject some aspect of marine biology, of which he has a deep interest and wide knowledge. This will relate to shells of the seashore, and will be followed on Saturday the 20th. May by an excursion to Waratah Bay, which will be led by Sir Robert. The fact that low tide on the 20th. is at about midday governed the change of dates of the meeting and excursion.

Sir Robert Blackwood is Chancellor of Monash University and has had a most impressive academic and business career, which is still continuing, of course. Members are urged to attend, with as many of their friends as possible, both the meeting and the excursion to Waratah Bay.

The Executive Meeting Monday 1st. May: This was held at the home of President and Mrs. Ern Homann, Moe, and the principal items discussed are as follows: -

Change of meeting and excursion as already referred to, and the meeting place for the excursion, which will be, as is usual for most of the Club excursions to South Gippsland, at the Meeniyan - Dumbalk junction on the South Gippsland Highway, at 10 a.m..

C.A.E. Spring School at Mt. Beauty: Miss Jean Galbraith reported that the School will be held at the usual popular Mt. Beauty between 28th. October and 6th. November. She will be again leading the Botany Group, and the School can be strongly recommended for a variety of experiences. And if the route taken is by way of Bairnsdale, along the Omeo Highway, thence the Alpine Highway over the High Plains, Hotham Heights, past Mt. St. Bernard and down to Harrietville, and over the Tawonga Gap with a botanist as guide and companion, an experience to be long remembered will be repeated.

Hazelwood Arboretum: On the advice of Mr. Bob Auchterlonie it was agreed that the conditions were too dry for the proposed planting of about 200 trees at the Arboretum. This did not deter a number of members however, who were the consistently active workers on planting and maintenance, from attending and carrying out many useful tasks, including the preparation of the ground for a possible planting when and if the rains come.

Natural History Medallion: The Executive has now joined with other organisations in nominating Miss Jean Galbraith for the award of the medallion for 1967. This is awarded each year for outstanding contributions in the field of natural history. We wish Miss Galbraith well-deserved success.

MOE BELLBIRDS:

by Mr. Ern Homann.

During a residence of over sixteen years in the Latrobe Valley, I knew of no nearer colony of Bell-Miners (*Manorina melanophrys*) than the long-established colonies at Glen Cromie, north of Warragul, and at Picnic Point, both on the Tarago River. These colonies have been at the same locations for nearly 60 years to my knowledge, and have probably been there much longer. The birds almost always have running water near at hand and seem, in Victoria at least, to avoid the dense forest country, preferring the smaller eucalypts and scrub.

Driving along the Old Sale Road, some 8 miles west of Moe, at the end of March, I was very surprised to hear the sound of a bellbird. Returning on the 2nd. of May I investigated more closely and found that there was a colony of some dozen birds. They seemed to have taken complete possession, much to the dismay of the White-plumed Honey-eaters, since they were briskly chased away by the Bellbirds. There is a sluggish creek in the area, and along the road grow Mess-mate Stringy-bark, Peppermint Gums and the usual shrubs of our district.

Where did these birds come from? They were certainly not there at the end of January. Perhaps an area has been bulldozed where a colony was established and its inhabitants, displaced by the destruction of their habitat, have found this new spot where I hope they will settle.

----- E. Homann -----THE SOUTH CASCADE CREEK EXCURSION SATURDAY 29TH. APRIL: by Mrs. Bon Thompson.

About 8 cars set out from Parker's Corner and others were already at South Cascade or joined the excursion later. Members of the Victorian Field Naturalists Club, from Melbourne, arrived by bus at about 1.30 p.m. Although members of the L.V.F.N. Club had been through the South Cascade area in the morning, many accompanied the Melbourne folk in the afternoon.

The lovely blue berries of the Tasman Flax-lily (*Dianella tasmanica*) and the Purple Appleberry (*Billardiera longiflora*) started the walk off on a happy note. The red berries of the Rough Coprosma (*Coprosma hirtella*) were few but very bright. The Hard Water-fern (*Blechnum procerum*) covered much of the ground in this area. The first fungi to catch the eye were the tiny blue pixie parasols. They were seen in many areas along the walk and always delighted us. Small golden-coloured fungi and the little brown parasols on long slender stems were discovered before we reached the big Myrtle-beech (*Nothofagus cunninghamii*). Above our heads were birds' nests - a big scattered nest and the trim cup-shaped nest of the Pink Robin.

(Excursion cont'd)

After crossing over the slippery bridge there were many filmy ferns, Finger Ferns (*Grammitis billiardieri*) and Lance Water-fern (*Blechnum lanceolatum*). Here also were cinnamon-coloured coral fungi and long-stemmed flimsy parasols. The orange fungi had gills that connected low down on the stem. Looking back into the gully from a clear place was a lovely view with the very shapely pointed Sassafras tree (*Atherosperma moschatum*) in the centre. We were fortunate to find the black snail, indigenous to Australia. It had scarlet edges to its foot and underneath was all scarlet. The shell seemed to be set at an angle rather than straight up as in the garden snail. It was not as timid as the garden variety and the many photographers had little difficulty in positioning it. Batwing fern (*Histiopteris incisa*) was shooting up new fronds; the Ray Water-fern (*B. fluviale*) grew near the track; the Shiny Shield-fern (*Ctenitis shepherdii* - (Wakefield)) by the water's edge, and the Mother Spleenwort (*Asplenium bulbiferum*) further up the track. More of the fungi here were the blue fungi, sticky-topped orange fungi, a thick-stemmed variety with a tiny top, tiny red umbrellas and then the big splash of white fungi on a log looking like huge flowers (almost 6" across) with frilled edges. In this area the photographers were very busy. A group of cinnamon-coloured fungi made more beautiful by a backdrop of dried treefern leaves was delightful.

The next fungi to attract the photographers were the large fawn-topped variety, about 8" across, with pale gills and an inch wide frilled skirt halfway down the stem. These were forest mushrooms. On rounding a big tree we were again delighted with a bracket fungus which grew in layers, and the dew drops hanging from these layers made a beautiful picture which somebody named the 'Fairy Chandelier'. Soon we reached the highest point of the track and thankfully commenced the downward journey. We gradually left the ferns behind, the plant life becoming more shrublike. The Mountain Correa (*Correa lawrenciana*) had many yellow-green flowers. From here on we had to watch the track as there were three Lyrebirds' mounds to be negotiated. We heard a Lyrebird imitating the Whipbird and Thrush, but did not see one. Mr. Jones reported seeing Pilot Birds and Lewin Honey-eaters during the day.

The Elderberry Panax (*Tieghemopanax sambucifolius*) had both green flowers and grey-blue berries on the bush. The little mat-like Alpine Cotula (*Cotula alpina*) showed its yellow flowers. Still there were fungi - here were the fawn 'Woolly Berets', clumps of yellowish brown fungi growing from a central base, and the many very dark blackish umbrellas that almost filled a hole beside a stump. The forest Groundsel with the leaves encircling the stem (*Senecio velleioides*) was still flowering and the red berries were on the Banyalla (*Pittosporum bicolor*). On the side of the road the Austral Elderberry (*Sambucus gaudichaudianum*) was displaying its lovely lemon-coloured translucent berries and another spectacular fungus was growing on the bank. Many of the bushes and trees with neither flower nor fruit, but identified during the day included Cascade Everlasting (*Helichrysum thyrsoideum*); Common Dogwood (*Cassia aculeata*); Sandfly Ziera (*smithii*); Mountain Pepper (*Drimys lanceolata*); Austral Mulberry (*Hedycarya augustifolia*); Musk Daisy-bush (*Olearia argophylla*); Snow Daisy-bush (*Olearia lirata*); Hazel Pomaderris (*Pomaderris apetala*) and Blanket-leaf (*Bedfordia salicina*).

(Excursion cont'd)

Mrs. Lyndon had an extensive collection of fungi on her 'display' table, and she spent much of her time naming varieties produced by the many enthusiasts. She told how fungi are important in the function of breaking down the debris on the forest floor and converting it to humus to enable the soil microbes to further convert the humus to a form suitable for use by the plants.

----- B. Thompson -----

IN QUEST OF BIRDS ALONG RINTOULS CREEK: by J. & E. Collins.

February 1967: The day was warm with a light breeze. The creek was very low, in places trickling through rocks, in other spots dry, broken by crystal clear pebbly pools.

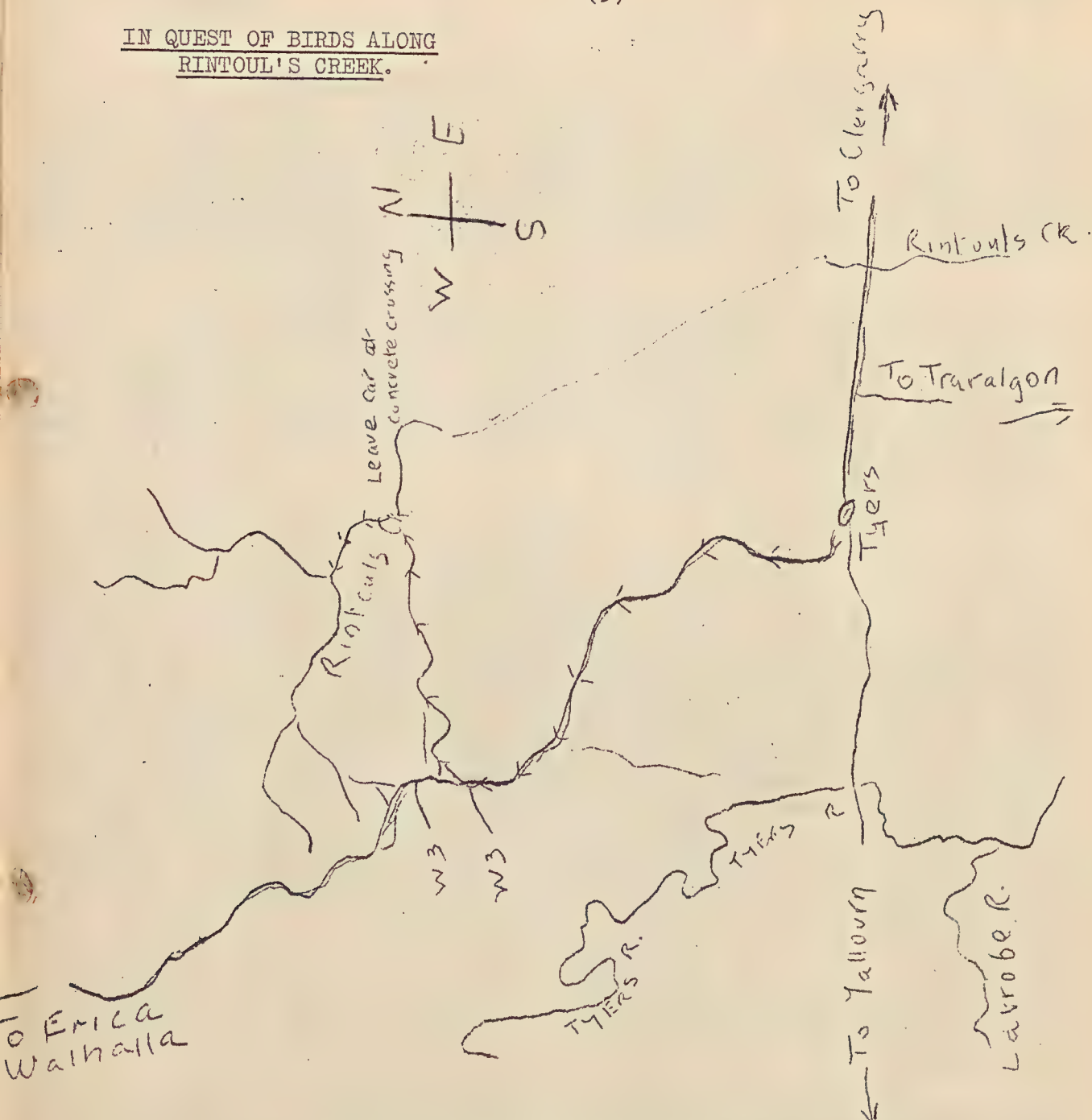
Minutes after the noise of our arrival by car had died away, the beautiful mimicry of the Lyrebird began. The sound we made walking in the creek didn't worry the bird, perhaps it was making too much noise itself. We left the creek where we thought we were close enough to see the bird. However, it was a different story when we took to the scrub - the song ceased and we heard the bird retreating. Our attention was diverted by a male Golden Whistler feeding silently in the Tea-tree above our heads. We sat down to watch him catching little moths and other insects. The silence brought loud song from our elusive friend the Lyrebird, then a soft clucking sound followed by a quick dash around us in an arc - back to where we had first disturbed him.

Outwitted, we returned to the creek to see Brown Thornbills and fussy little Grey Fantails. Blue Wrens were around the ferny pools close to the bank. Rufous Fantails with their little brood flitted in the Tea-tree nearby to where we found a nest containing young on a previous visit. A peep at the nest showed that it was still in good condition, and firmly attached to the branch. The reddish-brown material in the nest blended well with the rufous colour on the bird. White-naped Honeyeaters shrieked at us as we disturbed their play. They appear to spend much of their time pursuing one another. My friend remarked that they resemble miniature Penguins when they are still. It was noted that their nest, found the same day as that of the fantails and in use at the same time had deteriorated greatly, now appearing as a scruffy bundle hanging from the Wattle tree.

A rustling sound attracted us and a large 'black' snake wriggled out of a crack in a fallen dead tree. We could not agree on its name, but it was photographed and then measured, by noting its head and tail position, allowing it to move on, then applying the tape measure to the position. 49 inches long plus two inches for the curved parts! Once the snake realised it was being pursued it beat a hasty retreat, and we departed in the opposite direction, seeing snakes on every log thereafter. Another was encountered - lying on warm smooth stones. It didn't appear to be aware of our presence, although we were barely ten feet away. We tossed small stones towards it but the snake remained motionless until one of us moved towards it, then like

(5)

IN QUEST OF BIRDS ALONG
RINTOUL'S CREEK.



The approach to Rintoul's Creek is here from Tyers township up the old road through the Boola Boola Forest and on to the Moe-Walhalla Road; to turn off opposite the track into W3, which leads to the Tyers limestone deposits and quarry as well as the diversion pipes of the Tyers River.

(Birds along Rintouls Track Cont'd).

a flash it doubled back on itself and slithered into cover.

We had lunch at a spot where we had seen a pair of Rose Robins on a previous visit. No luck this time, in fact the place seemed to be devoid of birds. Leaving most of our gear we moved slowly upstream. Another Golden Whistler was flitting silently about in a Wattle tree - black, white and a pure vivid yellow in the bright sunshine. A small flock of Red-browed Finches darted in and out of Christmas Bush, probably feeding on the seeds.

We selected a pool to observe and sat astride a log. It was about 3 o'clock. A Rose Robin with two young birds arrived to play in the wattle, and we watched them for fifteen minutes, their grey and rose pink toned softly with the silver-grey foliage. I turned to see a Wonga Pigeon drinking at a little pool and, hardly daring to move lest we frightened it, we sat like corkscrews, peering at the bird through binoculars. It finished drinking and, watching us carefully, crossed the pebbly creek bed and silently disappeared into the undergrowth.

As this seemed to be a 'wateringspot' it became necessary to make ourselves less conspicuous. We were duly rewarded - a pair of Lewin Honeyeaters flew into a large Blackwood tree opposite us. These are trim birds, brownish olive-green, darker on the head with a bright yellow ear tuft. The Rose Robins were still in the Wattle; Rufous Fantails were feeding in the Tea-tree below, and in the distance Gang-gangs were calling, gradually coming closer until they reached a eucalypt overlooking the pool. The group was made up of two young birds - one male, one female, and an adult female. The young male had a red head and an untidy looking crest, and constantly squabbled with the female in order to get closer to the mother, who, to our delight, fed each fledgling in turn. They were so close that binoculars weren't necessary. Much louder screeching heralded the arrival of six yellow-tailed Black Cockatoos coming in to perch in the Blackwood. How clumsy they looked walking along the branches. The Black Cockatoos and the Gang-gangs flew off, but we still had the Robins and Fantails for company as well as a Cuckoo which we did not positively identify.

The sound of crackling and scratching to our right was coming closer and within half an hour a male Lyrebird hopped on to a log just ten feet away, and a shaft of late afternoon sun shone through his beautiful tail. We tried very hard to look like part of the surroundings - alas - he wasn't fooled and hopped off the log and disappeared.

Now homeward bound and feeling very stiff, we paused at the Wonga Pigeons' drinking place - the little pool held no more than a cupful of water and soon it would be dry.

Lower down the creek where the last rays of the sunshine played on crystal clear water many small birds were active. Yellow-faced and White-naped Honeyeaters were dipping in the water. Silver-eyes, some with quite bright yellowish olive plumage and Brown Thornbills bathed at the edge of the water. A Rufous Fantail bathed at a pool with a dead limb hanging over it. I do not think any bird of equal size can boast a more beautiful tail! Yellow-winged Honeyeaters darted backwards and forwards across the creek, while two Yellow Robins appeared to be admiring their perfect reflections in the pool.

(Birds Along Rintouls Track Cont'd)

Time was running out, now we were hurrying but still managed to see an almost tame Olive Whistler. Back at the crossing we enjoyed a cup of tea. A great commotion was going on in a eucalypt - the sounds were hard to match with any bird we could think of - and my friend then suggested that it was that of Bower birds, and when they moved lower into the trees this was seen to be so. I am at a loss to describe their noise, but my companion, Miss Jean Galbraith, described it as: "Like a sick starter motor of a tractor ..."

With the laughter of the Kookaburras in our ears we packed baskets and climbed into the car. The trip to the main road was two and a half miles, and in the disappearing daylight we recognized Bronzewing Pigeons, Crimson and Eastern Rosellas, and other birds as they crossed the track. Bird lovers in search of the less common Victorian birds will find this area very rewarding.

----- J & E -----

SEEDING OF BLACKWOODS: by Mr. E. Homann.

Late in January I noticed that the Blackwoods (*Acacia melanoxylon*) along the Narracan Creek were carrying a great quantity of seed. This was followed in the first week in February by a trip up the Morwell River Road near Boolarra. One would have thought that the blackwoods were having a strange late blooming, so thickly were they covered with brownish seed pods. The ground along the road beneath the trees was thickly covered with opened seed pods, and the small black seeds were thick upon the ground being easily found by noticing the coral pink funicle almost surrounding each seed. This funicle reminds me of a lifebelt round the seed and it is thought that, since blackwoods frequently grow by streams, seeds falling into the water are supported for a time by the funicle, and are carried along with a chance of establishing a new plant further down the stream.

----- E. Homann -----

'LIFE ON THE AUSTRALIAN SEASHORE' a review of Gladys McKeon's book by Miss Jean Galbraith.

Amongst the newer books of great value to field naturalists Gladys McKeon's *Life on the Australian Seashore* is exactly what we all want when at the seashore, though it will be appreciated especially by students of marine biology.

Mrs. McKeon combines the several skills which are needed by the maker of the best type of popular reference book. She has the necessary knowledge - all and more than is needed for the work - the gift of orderly

(Book Review Cont'd)

and simple yet graphic writing which the scientist's accuracy combines with the teacher's clarity; of enthusiasm which warms the writing without making it anything but what it is, a reference book for students, and the artistic ability which has enabled her to illustrate it with 25 beautifully drawn plates (one in colour) illustrating almost 500 species of shells, seaweeds, fish and other sea creatures, coastal plants and coastal birds.

Common names are given opposite the plates and at the end these are listed with their technical names.

Reference to each species in the text is followed by a heavy type reference to the plate illustrating it. The first eight chapters deal with the shore and tidal life in an orderly progression from the simplest (the one-celled Protozoa) to the most complicated (fish).

Chapter 9 is titled 'Chordata' (Birds): Odds and Ends', and after dealing briefly with shore birds discusses all those exciting odds and ends commonly found on beaches - tracks - eggs; bits of goose barnacles - bones; while Chapter 10 deals with shore plants; seaweeds (39 species are illustrated); mangroves, spinifex, convolvulus, noonflower (or pig face) and the rest.

It is a relatively expensive book (\$4.95) but for that price it gives one a great deal. At the other end of the scale in price and simplicity (but no less accurate) is the very readable and informative (and attractively illustrated) 'Seashores' by Beryl John, in Longman's Australian Nature Series. It costs 45 cents and though intended for children (and sure to be appreciated by them) will be useful to any adult who has not already a good general knowledge of shore life. I shall certainly take it next time I go to the beach where one might not risk the larger book.

--- : Jean Galbraith : ---

A VISIT TO A MARBLE QUARRY by Tony Moretti.

On the 2nd. April of this year, the day after the excursion to Sale and Sperm Whale Head, we went to see Mr. Frank Jones, who was engaged in bird-banding for the V.O.R.G., and he took us to the Toongabbie Marble Quarry near the Thomson River. On the way in we met up with a man who had failed to find the quarry and was on his way out again. We stopped at the tree on the track marked 'M.Q.' and ate our lunch. While we were here the searcher returned and asked for directions to the quarry, which we gave him and he went on his way, passing out of sight carrying his gold-panning dish and a spade, and a dog trailing along behind him.

After lunch we loaded our gear into the Land Rover, and then set off down the walking track, loaded with a miner's pick to gather specimens. When we reached the quarry we saw where the man before us had been shovelling some dirt. We picked around and found some good specimens of marine fossils in the limestone rocks. These we put in a bag which we put

(Visit to Marble Quarry Cont'd)

under a tree and set off up a track above the quarry (not the one we had come in on) where we found a shaft, at least 60 feet deep. As a stone was dropped down the shaft we stepped away from the edge as it did not sound very inviting for a plunge as an early morning dip.

We slowly climbed up the track which was very steep, and at the top crossed the track we had followed on the way down. This made our return trip shorter by about ten minutes. On the way down we retrieved the bag of specimens and eventually arrived back at the Land Rover. Here we had something to drink and then went to Carter's Block, where there were some apple trees. We tried some of the fruit which did not have codlin moth in them, and could see where the parrots had been eating them.

Some leaf specimens were picked up for a school project - we found a wheel with a driving shaft attached as though it had been used to drive something along at some much earlier period. We then drove back to Mr. Frank Jones's camp, identified the leaves we had picked, and set off to our own home.

----- Tony Moretti -----

NOVEMBER IN THE HILL COUNTRY OF NORTH-EAST OF VICTORIA: by Mrs.
Frances Gladstone of Beechworth.

Daphne Heath was out in cream bells on the sprawling bushes, and in among it was Dillwynia floribunda in orange spikes of pea-shaped flowers, and a little further along the rocky ridge was a stiffer, shorter branched pea, Dillwynia parviflora, with vivid yellow-gold and brown blossoms. The pink seed-pods of Acacia buxifolia swung in among the grey-blue foliage of the box-like shrub, and delightful it was to come upon a patch of flower-thronged heath-myrtle (Micromyrtus ciliata) in November, for the flowers deepen in colour for many weeks and are deep pink and crimson by then. With softly golden foliage they make a drift of delicately toned pinks and crimsons.

Green-hood Orchids (furry tongues! (Pterostylis barbata) looked a translucent green in the early gold of day as they showed under the gnarled branches of fringe myrtles, sprawled down a rocky slope.

We found in a rocky rift, amid brown moss, four rusty-hoods and a few steps away past a fallen stringy bark trunk, one more red-fan hood, crisp and curved exquisitely. These rusty-hood type of Orchid (Pterostylis squamata) merge into their surroundings with subtle camouflage. Spider Orchids (Caladenia dilatata) moved splendidly in the wind, with the wild grace of the bush-born.

A vivid orange splash of colour drew us to a clustered throng of Hoary Sunray, grey-foliaged little plants with bright everlasting flowers (Helipterum albicans) which brighten up roadsides during that month. In a stand of native pine among rocky outcrops 'Tigers' (Diuris sulphurea) rocked in the soft air, poised between pine trunks and lichen-silvered boulders.

(N-East Hill Country Cont'd)

Their two outheld and upheld petals, above the flower, clear yellow and utterly right to balance the shape of the two tails and yellow-brown labellum at the centre of the flower.

Birds flitted about, spilling golden notes into the air. Rufous Whistlers and now and then the creaky thread of grey fantails song amongst the pines, enriched the morning. Fringe Myrtle (*Calytrix tetragona*) fair and white-lit in the morning sun was out in starry blossoms, covering whole hillslopes with sprawling white-laden loveliness. Higher on the hill were rocky slopes of rock-fern (*Cheilanthes tenuifolia*) in climbing green groups, mingled with tawny mosses; and clefts red-blossoming pimpernel, with a few brilliant blue-blossoming pimpernel; small golden dandelions, and pink centuary opening early blooms, for it keeps flowering all summer long.

We crossed a mountain creek, its low bubbling murmur part of the living bush tapestry as was a bell-magpie passing with moths in its bill, flying down hill, probably feeding a young one. Shifting leaf shadows patterned the stream bush-ground where tiny shivery grasses carpeted among dry leaves, sticks, ferns and rocks, making a delicate mist of utter loveliness.

Bush secrets were shown here and there -- a rock-fern hiding an exquisite carpet of slender necklace fern fronds between a sloping boulder and two mossed rounded ones, making a triangle of rock-garden full of green toned artistry. The Necklace Fern is *Asplenium flabellifolium*. Crevices caught with chocolate flowers (*Dichogogen strictus*), shivery grass, tiny bonsai callitris graced with wheel-shaped cobweb gossamer, and interset with ferns and moss, were five feet or more above the ground. In cliff-sided boulders, some of the mossy gardens overhung by big rocks dripped gently with clear water for weeks after rain. Bordering the fern gardens were moss and sundew, often I noticed green-hood leaves and gnat orchids' flat circular leaves three feet or so above ground level in spilled native mulch from the trees.

We passed native pine (*Callitris endlichera*) stands so thick and straight stemmed only ferns grew with them. Here great boulders were softened by silver-gray creeping lichen, and frills of green rock ferns, which ooze from crack or ledge, creating little windblown gardens; and to clothe granite outlines bluebells (*Wahlenbergia coccinea*) sway in gentle balance, where they find foothold to cling in rock-cliff positions, and hold out their bells with consummate grace.

Bonsai like star hair clutching a four inch ledge, struggled up least six feet before the crooked stem managed to fling out six sprays of white stars amid meagre leaves. Star-hair is the *Asterotricha ledifolia*. Trailing little yellowish tangled delicate plants grow nearby in another cleft -- Forest star-wort (*Stellaria flaccida*), decorating a miniature cliff garden with beauty. Plough-share Wattle (*A. vomeriformis*) looks subtly at home in its native setting sprawled over a rock face from a high crevice.

Hovea heterophylla, the blue-bonnet of early Spring (August) was setting rounded seed pods on one slope, and *Hardenbergia violacea* trailed a

(N-east hill country cont'd)

a few late purple clusters brilliant against grey rocks. Now a plant of twining glycine held out its three-leaved hands and pink-blossoming shoots for a climbing supposrt on a great rock. Hibbertia linearis with the large clear yellow blossoms was out in full and merged its grey foliage into the rocky hillside. It appeared so much at home that the soft beauty of the blooms seemed at once to absorb and reflect the glory of the golden morning. There were green spears of another crevice grower, the Nodding Blue Lily (*Dianella revoluta*) which held up intricate branching flower stems supporting brilliant blue flowers with bright stamens like a tiny lighted orange flame circled by blue.

The next observed crevice held the native kangaroo grass (*Themeda australis*) gracefully, and little orange flowers and neat leaves of native hypericum japonicum, which both harmonize in tawny tonings with a stunted pine on a horizontal ledge. An overhanging stringy-bark sapling held a baby robin which a mother robin came and fed near a pine where a bright scarlet male robin watched. Grey fantails sang their high song like a stringed instrument, and two yellow-tailed thornbills flitted by. A diuris in elfin pose on a tall stem leaned from a leafy crevice, with four blooms of yellow and brown elegance. From ahead in a slope of the rocks small gnarled bonsai red gum curved white trunks amongst a moving sea of white blossoming myrtle. At one side was a stand of callitris with the granite outcrop of the hill summit above.

Across the valley wafted the mingled scents of daphne heath, pine, myrtle and eucalypt, a gathering of bush essence which became expressed in the bubbling of the creeks voice and positive joy outspilled in a rufous whistler's golden song, as well as in the bush fragrances. A large lizard crawled here too, his well-worn home rock cleft held his extended tail shining in the morning sun. Pink Portulaca (*Calandrinia calypttrata*) made a cute miniature rock garden of plump pink leaves and tiny pink blossoms. Further on Isotoma with sky-blue blossoms and lacy foliage made a cluster of striking beauty against its rocky environment.

A little fringe-creeper (*Thysanotus patersonii*) beautified a dry leafy bank between rock and black callitris trunks, turning a wedge of space into enchanted land, with fringed purple flowers twining a dry stick, glorifying their native setting. (If picked they die instantly). In a rock on a high peak was a jutting wedge full of leaf mulch spilled down a steep south side and there grew lovely blue veronica, arching out long leafy arms with six inch spikes of saxe-blue blossoms above shoulder level. Blanket-fern curled softly green in shady nooks of rock, and moss bordered the sheltered fernery. A baby male scarlet robin, looking fresh and bright, caught a grub and settled on a pine trunk to bang and then swallow it in time honoured robin fashion.

The wind carried a spherical mist of dandelion seed head and it lodged on a ledge - nature was planting the garden for the next November!

May 1967.

A GEOLOGICAL NOTE: by G.T. Scanlan.

Returning from the Healesville Wildlife Sanctuary on a recent Saturday, with three friends as company, I came by way of Woori Yallock down through Yellingbo to Cockatoo, heading for Pakenham and the Princes Highway. We had passed, in the distance, Mt. Donna Buang, standing comparatively high and at this time of the year, clear of snow. The vegetation once the road turns off at Woori Yallock is not particularly impressive, but fortunate to survive in an area which has been ravished for a long time by European man. The topography is rounded, indicating long periods of erosion effecting a levelling of a former high country. It was at about six miles north of Pakenham, just before reaching Pakenham Upper, that we drove into, and I promptly stopped in, a longish, recently cut road cutting which provided the main feature of interest in a day's outing.

+ in Here, the length almost of the cutting on the 'up' side was a classic example of an anticline - of folding and its result - in fresh condition, which is to say that the rocks of which it was composed were not yet showing any special signs of the weathering which exposure would cause it to be reduced to the attenuated lines and conditions of similar evidences of folding elsewhere. This was an anticlinal fold of beautiful symmetry, and even to the uninitiated its pattern in the cleanly cut rockface would have been of great interest. Readers are aware of the definition of a fold, but have probably not had the opportunity to observe them in the condition of the one we saw at Pakenham Upper. In his "Outlines of Structural Geology" Professor Sherbon Hills states that: "An anticline is an upwardly convex flexure (fold) in which a given bed intersects the same horizontal plane in both limbs." In his more popular (or better known) "Physiography of Victoria" he stated that: "Crumples or wrinkles in strata are termed folds: those forming ridges are anticlines, and those forming troughs, synclines..." To the geomechanician the former definition is the most accurate, while to you and to me probably the latter means most. It is an easy matter to imagine an anticline as an arch, in this case perfectly symmetrical, and the reverse is, of course, a syncline.

And a few weeks ago, I returned from Kyabram to Yallourn by way of Bendigo and Castlemaine. In the latter town I saw, again, the anticlinal fold in Lyttleton Street, which is illustrated in Sherbon Hills. Bendigo provides many examples of anticlines in what are known in mining circles in particular as 'saddle reefs'. At Bendigo 37 anticlines were known to exist in a width of seven miles, and 24 saddle reefs occurred in a depth of 2,200' in one mine. The reefs occurred between beds of sandstone and slate and were formed, so it is said, by the deposition of silica in cavities formed by the bending or arching over of two beds. The gold was found richly in these reefs which lay between the hard cap or 'peak' of the anticlines and the saddle itself. The saddle reefs were of great size, and in many cases immensely rich. Another example of intense folding is to be seen on the Erica-Walhalla Road.

The Pakenham Upper anticline is well worth the short diversion from the Highway and the about six miles north!

LATROBE VALLEY FIELD NATURALISTS

CLUB.

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Hon. Secretary: Mr. S. Belgraver, 179 Lloyd Street, Moe.

Meetings:

General Meetings of Members are held on the fourth Friday of each month at the Yallourn State School, commencing at 7.30 p.m.. A programme of proceedings may be obtained from the Secretary.

Excursions:

These are in the nature of field days and are held, usually, on the day following the monthly general meeting. Some excursions take the form of 'camp-outs'. Again, the programme should be referred to. Visitors are always welcome at meetings and excursions.

Subscriptions:

The Annual subscriptions, which become due at the end of February in each year, are as follows:-

For Adults:	\$1.00
Juniors:	.10
Families:	\$1.50

The Latrobe Valley Naturalist:

This is the official publication of the Club, and is registered at the G.P.O. Melbourne for transmission by post as a periodical. Registration is a privilege, but requires that the magazine may be posted only to members who have paid an annual subscription, as above.

Contributions are invited from members of the Club on any aspect of natural history. Articles submitted may be of any length (within reason), and mss. may be written or typed, and may include drawings. They should be sent to:

G.T. Scanlan,
c/o Latrobe Valley Community Hospital,
YALLOURN. VICT.

LATROBE VALLEY NATURALIST.

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LATROBE VALLEY FIELD NATURALISTS' CLUB

YALLOURN.

VICTORIA.

Latrobe Valley Naturalist.

Issue No. 42.
June 1967.

Editorial:

Dear Fellow Field Naturalists,

General Meeting Friday 23rd. June: "Building Stones of Victoria" is the subject of a taped, coloured slide illustrated lecture which will comprise the main part of the June meeting. This interesting talk, with a number of excellent slides, was prepared by a member of the Geology group of the Victorian Field Naturalists Club, and readily made available to the L.V.F.N.C., for which we are grateful.

As usual, the meeting will be held at the Yallourn State School, and commence at 7.30 p.m.. As always, visitors will be welcome.

Excursion Saturday 24th. June: This excursion was to have been to the quarry at about $1\frac{1}{2}$ miles from Welshpool for the purpose of viewing a rock face typical of the geology of the area, and other interesting places in South Gippsland. It was not possible to arrange for a leader, however, and an excursion to this area has been deferred to a later occasion. It has now been decided to indulge in a preview of an area which, although botanically interesting now, will be many times so in the spring, when the boronias, grevilleas and a host of other native plants will be in glorious blooming. The projected route has many scenic attractions, and the natural features of the country to be visited will also interest the geologist and the ordinary bushlover.

Members are asked to meet outside the Saleyards at Warragul at 10 a.m. or earlier, so that a fairly early start may be made. The route will be from Warragul along the Princes Highway to Drouin, past the old Robin Hood Hotel on its western side to the Labertouche turn-off at about seven miles from Drouin. The direction of travel is then northerly to the locality of the first of three Wildflower Reserves along the Gentle Annie Road, about five miles from the Princes Highway. We will pass and probably not recognize, the eminence of Gentle Annie, which rises to about 2200'. Where the road meets the Tarago River (a tributary of the Bunyip) we turn and travel in an easterly direction with the river to our north, until reaching the Warragul-Noojee Road at Neerim.

It is hoped that, during this period of travel, and beyond, descriptions will be provided by 'field Nat' friends from the Warragul Club.

From Neerim on to Noojee, where a brief stop will be made to view the carved, prehistoric monsters outside the hotel. The carvings will be seen to be not all of examples of Australian fauna, and to be of the 'primitive' school of sculpture, but they are nevertheless, of considerable interest.

It is intended then to continue along the Noojee-Moe Road to the turn-off at about three miles from Noojee, to the Toorong Falls. The falls,

Editorial (Cont'd).

are part of the Toorong River, which is a major tributary of the Latrobe River, and are quite spectacular as they cascade down over a series of resistant rocky outcrops. The river is found to be divided, adding to its attractiveness, and the climb to the topmost falls is both a challenge and a test of fitness.

The Toorong River has its origins mainly in the southern slopes of the Toorong Ranges, where Mount McDonald reaches a height of 4096 feet.

It is suggested that on the return journey we follow the road from Noojee to Warragul, thence eastward along the Princes Highway. The Noojee-Warragul Road is a much more comfortable road to travel in convoy than that through Hill Eld, Willowgrove to Moe, and promises much more in the way of scenic attractions.

So. 10 a.m. outside the Warragul Sale Yards on Saturday 24th.

Blackwood

Lecture by Sir Robert Blackman: The very interesting and informative lecture by Sir Robert at the general meeting on Friday the 19th. of May was not reported, but members were full of praise for the fascinating glimpse into marine biology which it afforded. Sir Robert has kindly forwarded directions for making a salt water aquarium, which is reprinted in this issue of the Naturalist.

The excursion which followed on Saturday the 20th. June was well attended, and again of great interest and value. A report prepared by Mrs. Padfield will appear in the July issue.

Morwell National Park: Elsewhere in this issue is reprinted an article by Dr. L.H. Smith, Director of the National Parks Authority of Victoria. Due acknowledgement is made to the Editor and Publisher of 'Victoria's Resources' for this article on a park in which this Club has an important interest. It is understood that a further five acres has now been added to the park.

It is believed that only a few members of the L.V.F.N.C. are subscribers to and receive 'Victoria's Resources' which is published as a quarterly. This is an authoritative, extremely well-produced magazine, the principal theme of which is 'conservation'. The articles are all written by experts in their particular fields, and in a language that the layman can easily understand. The photography on the front cover of each issue is well worth, alone, the 20 cents for a copy. A \$2 subscription to the Natural Resources Conservation League will also cover the quarterly, or 80c. is sufficient to cover the cost of the 'Victoria's Resources' for one year.

"Wildflowers of Victoria" by Miss Jean Galbraith: A completely revised edition of Miss Galbraith's popular and valuable work on Victoria's wildflowers is to be available on the 3rd. July. Copies may then be obtained from the Secretary, Mr. Belgraver, or from any bookseller. The retail price will be \$4.75 per copy, although this may be less at the quantity price paid by the Club. This will be an essential field reference to an extensive range of native flora.

Hazelwood Arboretum: A further planting of trees at the Hazelwood Arboretum was made on Saturday 27th. May. It is understood that something in the region of 120 trees were planted under the direction of (and the active participation of) Mr. Bob Auchterlonie. The weather has probably been suitable for their continued well being, and it is hoped that it will be possible to plant more suitable types of trees in the coming Spring months.

The Club Library: In the affairs of some us, things move sometimes slowly, but it can now be reported that a suitable cupboard has been obtained in which to house the books of the Club. The Club possesses a number of very useful reference books, and numerous copies of periodicals valuable also for reference purposes, and the acquisition of a cupboard in which to keep the books - a place to keep the cupboard by the kindly interest of the Schoolmaster, Mr. Smalley, and a Librarian to look after the Books in Mrs. Crane, will enable the Club to procure more books of a suitable nature.

Club Educational Ambitions: Negotiations related to the various aspects of arranging for classes in elementary biology and subjects necessary for an understanding of natural history now show real promise, and it appears very likely that classes can be arranged to start early in 1968. In this matter, as in some others, it has been necessary to 'hasten slowly' - the remaining months of 1967 will be well spent in properly organizing the proposed educational programme.

Census of Plants: Lists of plants identified in the following reserves, and the list of trees which have survived at the Hazelwood Arboretum will be available to members very shortly as supplements to this magazine. The lists represent a vast amount of field work, as well as more careful checking, by Miss Jean Galbraith and other members of the Club, and will be of great value now - it is to be hoped that they will not soon become matters of mere historical nostalgic memory because of their destruction.

Executive Committee Meeting: This was held at the home of Miss Jean Galbraith on Monday 5th. June. Some of the above matters were referred to at the meeting. The July Executive Meeting will be held on Monday 3rd. July at the home of Mr. & Mrs. O. Thompson, at Traralgon South. Mrs. Thompson is, of course, the Club Publicity Officer - a most successful one !

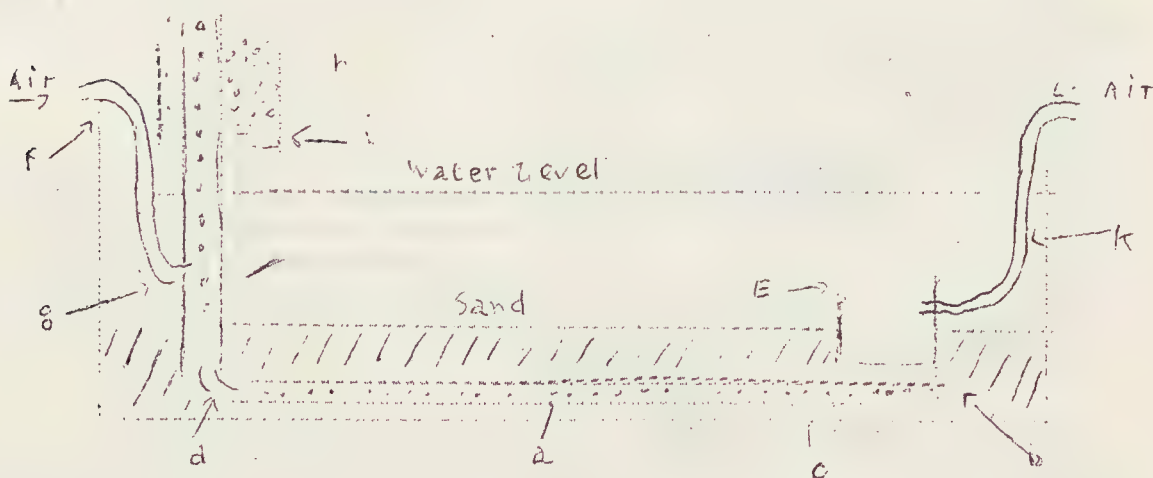
----- G.T. Scanlan -----

----- Hon. Editor -----

THE SALT WATER AQUARIUM: by R.R. Blackwood.

A salt water aquarium can be successfully operated in the home, and many types of marine creatures can be kept alive and their habits observed. The main requirement is a plentiful supply of oxygen to the water, a dimly lit location, a shallow tank, and the avoidance of high temperatures.

The tank should be of heavy glass and should be puttied to the frame. The frame should be of stainless steel to avoid rusting. These tanks are available in many sizes (e.g. from Myers) and a suitable size is 18" x 9" x 9". Cost about \$6.50. The tank is set up with a sub-sand filter as follows:-



A polythene tube $\frac{1}{8}$ " diameter (a) is closed at one end (b) and is perforated throughout its length with small holes (c). This is connected by a glass elbow (d) to a vertical tube (e) of $\frac{1}{4}$ " polythene. The tube (a) is covered to a depth of about 1" with sieved and thoroughly washed sand, the grain size of which is larger than the holes (c) to avoid clogging up. A small polythene tube (f) about $\frac{3}{16}$ " diameter, is introduced into tube (e) through a small hole at (g). The upper end of tube (e) passes through a hole in the base of a plastic filter body (h) and its upper end is located just below the upper edge of the filter body. The bottom of the filter body is perforated. The perforations are covered by a bed of fibre glass about $\frac{1}{2}$ " thick (i). The filter body above the fibre glass is filled with activated charcoal pellets.

Continued over:-

Salt Water Aquarium (Cont'd)

The action is controlled by admitting air from an air pump through tube (f). Air bubbles rising in tube (e) carry water upwards over the top of tube (e). The water is sucked from the tank downwards through the sand bed which acts as a filter for debris, through the holes (c) into tube (a), and is continually delivered to the charcoal bed, which purifies it and helps to remove carbon dioxide, and then drops through the bottom of the filter into the tank again. It is thoroughly aerated by the air from the pump and from the atmosphere. A turbid aquarium is soon clarified by the sub-sand filter.

Auxiliary Aeration. It is wise to aerate the opposite end of the tank by air from the pump through tube (k) and plastic cup (e) embedded in the sand. Both (f) and (k) can be fed from one air pump, and the flow of air is controlled by individual tubing screw clamps placed on tubes (f) and (k).

The pump. The simplest and most effective air pump is a diaphragm type pump. These operate from the standard 230 volt A-C. outlet and operate by vibrating a rubber diaphragm. They are reliable and fairly silent, and can be purchased from aquarium suppliers for from 5.00 to \$8.00 each.

Filter. The perforated tubing and air lift and filter body will cost about \$1.50. Other tubing, aerated cup, fibre glass and activated charcoal can be obtained from aquarium supply houses (e.g. Myers, Angel, etc.). It is important to maintain a good flow of air at all times. If oxygenation ceases, animals will soon die.

Decoration. The salt water aquarium does not need much decoration. A few well placed clean washed stones are sufficient. Sea weeds will not remain alive for long, and soon putrefy. They can be kept for a short time, however, for feeding sea slugs, etc.. The aquarium will soon gain in appearance from the animals kept in it. For example, sea anemones, hydroids, sabellid worms etc..

Animals. I have found ordinary sand anemones easy to keep, attractive and interesting. Collect those attached to small stones by collecting stones as well, and placing in the aquarium. Feed with small pieces of raw meat every two or three days. These anemones expand fully when fed and well oxygenated. They will move about from time to time by sliding on their bases, particularly on the glass.

I keep Octopus Maculatus for three months, feeding on raw meat every two or three days. Animal friendly, but is a predator on some things - e.g. Feather Stars. Will not touch shells - shuns anemones. Finally ate a small squid, refused further food for a week, and died.

I have kept tropical chitons for five months, but these finally died from lack of food. Sea slugs and sea hares can be readily fed on sea weeds, but are sensitive to increasing temperatures and die easily due to summer heat. Cool aquarium by adding lumps of ice.

Small cowries (Ellatrinia merces) are delicate. Have not survived more than two weeks. Have kept scallops (n.alba and c.Asperrima) for two months, but here the difficulty is to feed them. These are filter feeders and added food does not seem possible. Likewise feather worms such as Sabellastarte.

Salt Water Aquarium Cont'd.

General. Make up evaporation with fresh water. Renew the stale water about each three months. When photographing with flash, be sure to check absence of reflections in glass by testing with a torch, and use a black or dark green or dark blue background behind the aquarium.

Keep a sheet of glass or plastic over the tanks supported above it about $\frac{1}{2}$ " to allow free entry of air. This will keep falling dirt from settling in the tank and condenses much water vapours, thus reducing evaporation losses.

Observe your animals particularly at night with a torch - most animals are more active, and distend and open out more in the dark.

Skim out floating particles of food etc., with a small scoop made of fly-wire netting.

I should be glad of any information from members as to ways and means of feeding filter feeders such as bivalves, worms etc..

----- R.R. Blackwood -----

THE ORANGE-CUP FUNGI: An Observation By Mrs. Bon Thompson.

Along the roads in the bush, the orange-cup fungi is growing in profusion this year. These roads are used by timber trucks and bulldozers, and are of very hard clay. The fungi has come up in patches of approximately 30 in the wheel tracks.

In the heaps of dirt on the sides of the roads the fungi are singly or only a few, but are much bigger. We thought of photographing one of these larger ones but it had dirt in the centre. I tried to blow the dirt out and when I stopped blowing a little cloud of spores (at least I hope that is what it was !) rose from the centre of the fungi. We repeated the experiment several times and each time were rewarded with the little cloud. Does this mean that the fungi responds to the breezes to scatter its spores ?

----- B. Thompson -----

BATS : by Miss Betty Kemp.

I had always thought that bats (except the big fruit bats) lived or slept in caves and dark places and, in fact, had never met one until a few years ago when my sisters found one, almost drowned, in one of their tanks. It was like a little brown monkey from the back, with a bullet head and little ears; but from the front the head resembled a pig's, with small forward thrust pointed ears, deep set slit eyes and piggy snout. It had a

Bats. (Cont'd).

musty cave-like smell. When it recovered my sisters released it at dusk and it flew away.

Recently, my attention was drawn to a small object 20 feet up in the jamb of one of the huge roller doors in Yallourn Power Station's west wall. It appeared to be hanging from one claw and had been there for several days. We guessed it was a bat and, as it seemed rather unusual for one to be sleeping in the open like that, we thought perhaps it was dead. However, it must have been in quite a deep sleep for, when poked gently with a long rod, it fell heavily to the ground, landing on its back with outstretched wings which spanned about 9 inches. It lay there with its mouth wide open, showing a perfect set of tiny sharp teeth, apparently stunned but, we hoped, not injured. Placed in a box on its back, by the time I had got it back to the office it had retracted its wings to over its eyes and, still on its back, was quivering all over.

I noticed that it seemed to be host to a tiny, very active spider, and a number of equally active light-coloured lice. Left alone for a while, it eventually assumed a more natural position on its face, breathing normally and looking like a little brown monkey moving its head from side to side. Finally it was discovered hanging head down by both feet from the upper edge of the box just under the lid.

Not wishing to release the little creature in daylight around the Power Station, on the way home I put the box with lid ajar in the fork of a Eucalypt near the Station and waited impatiently over the weekend for Monday to arrive to see if the bat had returned to its old resting place. It was neither in the box nor on the door jamb at the Station. We may not meet again !

It is possible that this little bat was *Eptesicus pumilis*. According to Charles Barrett (Aust. Animal Book, pp. 105-6): "Smallest of all the Australian bats, with its wing spread of less than 9 inches, the dusky-coloured, short eared little bat (*E. pumilis*) ranges all over the mainland, and also occurs in Tasmania. It lives in small colonies, in tree hollows and caves." It is a member of the small insectivorous sub-order Microchiroptera of the order Chiroptera to which all bats belong, the other sub-order (Pteropus) comprising the big flying foxes or fruit bats.

I wonder what prompted this particular bat to perch where it did, out in the open and alone ? Was it an outcast from the colony - or just a bit smarter than the rest, for the flood-lit Power Station must attract many insects at night. The many spider webs attest to this also, and perhaps there was a symbiotic relationship between the little spider and its host, instead of one of rivalry for the same food.

TREES FOR THE BIRDS: by Miss Jean Galbraith.

To anyone desiring to plant a tree that will attract birds and also provide winter flowers I would commend the pink or red flowered forms of Ironbark. Red Ironbark (*Eucalyptus sideroxylon*) with furrowed black bark, green or bluish leaves, and hanging clusters of pink, white or red flowers, is a notable 'bird tree', but perhaps even better is White Ironbark, (*E. leucoxylon*) or preferably *E. leucoxylon rosea*, with smooth white bark and even larger flowers. The colour of the blossom does not make any difference to the birds, but though all forms are beautiful, the bright colour-forms are especially attractive to us.

The ironbarks are not trees for small gardens, but where there is room they are well worth growing. Red Ironbark is native to the Glengarry-Glenmaggie district, where it is flowering now. White Ironbark is a tree of drier places, but does well here. Both species flower well in my garden, where White Ironbark has been flowering since mid-April. On almost any day one can see (and hear) all species of honeyeaters in addition to Red Wattlebirds and Noisy Miners in it.

Two species of Parrots (Crimson and Eastern Rosella) are also there often and seem to spend their time nipping off the blossom. Usually there are three species of Lorikeets, which lick nectar from the flowers, but they have not come this year; while insectivorous birds (thornbills, tree-creepers and silver-eyes and Jacky Winters) are there every day, with other species as occasional visitors.

----- J. Galbraith -----

GREEN GOLD: by Bart Sterkenburg.

It is a beautiful, still, warm Autumn afternoon. Four men are climbing a steep, overgrown bush track in one of the most rugged parts of the Latrobe Valley. I am one of them ... and, of course, the last one! There are so many things to admire in the bush, especially in the golden sunlight or an perfect, late afternoon. We are well equipped with shovels, picks, hammers, sieves and even miners' rights. Sinking shafts is not our daily work, but our hopes are high.

I cannot, at this stage, tell you the exact location of our objective as we have not yet staked our claim, but I can assure you that it is rugged, steep and dangerous - full of old unfilled mine-shafts, and of very great beauty. About ten yards to the left of the track I notice a 'man-made' excavation, a water race from a mine shaft, perhaps dug some thirty or more years ago. In the middle of it is a large group of Coral-ferns, and while passing I notice a few very fine sprigs of fern. I pick two of them and put them in my pocket to be identified later and hurry on, as I do not wish to be left behind in the treacherous area.

Here was a clump of orange mushrooms, glowing in the last sunrays; there

Green Gold. (Cont'd).

a bunch of red heath and the picturesque banksias are everywhere. Finally back to the cars and we are heading for home. Suddenly I remember my little ferns, expecting them to be young Coral-ferns, but find them to be totally different and very dainty. Even before drinking my well-deserved cup of tea I browse through Norman Wakefield's 'Ferns of Victoria and Tasmania', and am more and more convinced that this find could be a rare one. However, in order to be sure, I decide that the best thing to do is to consult botanist Miss Jean Galbraith, and so, on the next day- with both ferns still very fresh-looking - I set off to Tyers. In a short time Miss Galbraith was able to assure me that, indeed, the fern was the (in Victoria) rare lacy Wedge-fern (*Lindsaea microphylla*).

According to Wakefield there was a patch of this fern discovered in 1940 near the Princes Highway at Karlo Creek near Mount Drummer, and later near Hedley in South Gippsland - both in man made excavations.

Maybe in another 30 years from now there will be more lacy Wedge-ferns found in similar locations. One thing however is certain : I may stake my claim around this fern patch and my 25 cents for the miners' right is not paid in vain !

----- Bart Stenkenburg -----

BOOK REVIEW;=

"VICTORIAN NATIVE ORCHIDS." Vol. 1 (C.E. Gray) by
Miss Jean Galbraith. (Pub. Longmans) \$3.50

Many orchid lovers will welcome this little book in which 71 species of the more widely distributed orchids are illustrated and described. Each of these has a page to itself with a clear photograph of the species (31 of these in colour), scientific and common name, description (non-technical but accurate), a description of habitat, distribution and flowering season.

Descriptions of each of the larger groups are preceded by information under the common generic name: (Spiders, Greenhoods etc.), and they are followed by a list of all members of the genus not described, so that all Victorian species are listed and, as stated, 71 of them described and illustrated.

A clear drawing showing parts of an orchid flower precedes the descriptions, and a preface by Mr. Willis, Assistant Government Botanist, vouches for the accuracy of the letterpress and contains a reminder that all orchids are protected by law, and all urgently need out protection.

In a review addressed to the members of the L.V.F.N.C. it is hardly necessary to emphasise this. We do protect as well as enjoy and have learned to study orchids without picking them. This extremely useful little book will help us to do so.

----- J. Galbraith -----

THE MORWELL NATIONAL PARK; by Dr. L.H. Smith, M.Sc., D.Ph.(Oxon), F.R.A.C.I.
Director of the National Parks Authority of Victoria. Article from the
"Victoria's Resources" Magazine Vol. 9 No. 2. June-Aug. 1967.

"The circumstances surrounding the creation of Victoria's twentieth national park are as interesting as they are unusual. In fact, at the moment of writing, the area in question has not been declared, although on 29th. November 1966, H.E. the Governor of Victoria signed a Bill which had recently been passed by both Houses of Parliament, providing that the land should become the Morwell National Park after certain preliminary action had been taken.

Normally national parks are derived from Crown lands and it is necessary before an area may be dedicated that it become Crown land. The "preliminary action" referred to therefore consists of the transfer of this land to the Crown. The events leading to this action are as follows:

Early in July, 1964, the Morwell Shire Council brought to the attention of the Authority an area of land owned By Messrs. Quigley Bros., and suggested that it be acquired to ensure that it would be preserved for posterity as a national park. The adjoining land in the rapidly developing district of Churchill was being subdivided, but one of the owners, Mr. Ray Quigley, no doubt because of boyhood memories, sought to have this particular tract of land preserved. This was our second experience of a landowner striving to resist the pressure of development in order to preserve a favourite beauty spot; the other case was concerned with the Tarra Valley National Park, the Ranger of which, as the owner of an adjoining block of land, was anxious that her land should become part of the park. Eventually, through the generosity of the Bird Observers Club, Mrs. Healy's wish was fulfilled.

Officers of the National Parks Authority and Lands Department inspected the area, and, despite the fact that it was snow-covered, reached a favourable conclusion. Unfortunately, the land was privately owned and the Authority had neither the money nor the power to purchase it.

My first visit to the area took place on 30th. September 1965. It was a fine sunny day and the omens were good. Looking back through notes prepared on this visit, I find that I wrote as follows: "The scenery is truly beautiful. In addition to scrub consisting of low acacias and dogwood there are numerous blanket-leaf and pittosporums, great masses of varnish wattle, and towering above them many magnificent eucalypts, Blue Gums (*E. bicostata*) and Grey Gums (*E. cypellocarpa*) being the dominant species. We saw a number of Nodding Greenhood Orchids and Butterfly Orchids (in bud). There were also some magnificent tree-ferns".

And on bird life:- "It is an excellent bird area. Within a few minutes we had heard the Bronze Cuckoo, the Golden-bronze Cuckoo, the Grey Thrush, the Grey Fantail, the White-throated Tree-creeper, Thornbills, Pardalotes (2 species), the Crested Honeyeater, other species of Honeyeaters, Silver-eyes, Golden Whistlers, Spinebills, Blue Wrens, the Fantail Cuckoo, and the Whipbird; and we were greeted by the songs of these birds as we proceeded up the gully. A lyrebird had called a greeting before we were out of the car".

The Morwell National Park. (Cont'd).

On this excursion I was accompanied by Mr. John Connan, Morwell Shire Engineer, and Mr. R.G.M. Yorston, one of the Authority's Technical Officers. I recall that we made slow progress as we paused to admire the many attractive features. I had taken the precaution to bring my tape recorder, just in case the birds sang!

Later on that same day, I attended by invitation a meeting of the Morwell Shire Council and informed the Council that in my opinion the area was suitable for dedication. This was probably the first time on which a visitor to a meeting of the Council had played a tape recording of bird calls to the members of the Council. Certainly, the songs of the Whipbird, Grey Thrush, Golden Whistler and other birds created a favourable impression in the Council Room.

Acquisition. The key to the solution of this problem was still finance. However, following negotiations in which the Shire Council, the Authority and the Minister for Lands all played a part, on 9th. December 1965, the Treasurer approved a grant of \$10,500 to the Shire to meet half the cost of purchase, provided that the Council agreed to surrender the land to the Crown for dedication as a national park, and to provide for public access. As only Parliament may declare an area of land to be a national park, obviously these arrangements were subject to the approval of that body; hence the need for the legislation to ensure that the land having been purchased by the Government and Shire Council in collaboration would in fact become a national park. At the date of writing, the land transfer is proceeding, and is expected to be registered during the next few weeks.

Description of Area.

The land in question consists of Allotments 22 and 23, Section A, Parish of Yinnar, and contains 341 acres and 3 roods. The area consists of a number of steep sloping ridges with a creek running in a small channel 30 to 40 feet deep. The slopes are well timbered, although they show the scars of the early years of settlement and of the the 1939 fire.

The main gully, which is in fact a tributary of Middle Creek which in turn is a tributary of the Morwell River, is the principal feature for national parks purposes. This is a truly beautiful area with magnificent Blue Gums and Grey Gums. The gully has developed a plant community of Pittosporum, Blackwood, Blanket-leaf, Austral Mulberry, Musk and Christmas Bush. To walk through such an area, on a fine spring day, whilst listening to the calls of the many birds which live in the gully and on the slopes, is a very pleasant experience.

One of the principal reasons for having this reservation made was to preserve the Butterfly Orchid (*Sarcochilus australia*), sometimes known as Gunn's Orchid, which occurs on the trunks of trees. Although Victoria has many species of native orchids, which are so varied and beautiful that whole monographs have been written about them, none is finer than the Butterfly Orchid. A relic of ages when jungles covered southern Australia, it survives now only in a few dense gullies. Its flowers are usually yellow-green with a

The Morwell National Park (Cont'd).

coloured labellum, several on a drooping stem. The Butterfly Orchid is an epiphyte; that is, it lives on trees. It is not a parasite, but merely uses the tree for support. Only a few of our orchids are epiphytes, nearly all being terrestrial. The name 'Gunn's Orchid' derives from that of its discoverer, Ronald Campbell Gunn, said to be the most famous amateur botanist Tasmania has produced. Gunn collected his first specimen near Burnie in Tasmania, and the species was known for many years by the scientific name of *Gunnia australi*. Unfortunately, this beautiful orchid is now quite rare in the two Australian States where it was once common.

On the other hand, the area contains a considerable number of other plants and birds. Members of the Latrobe Valley Field Naturalists Club have identified 97 vascular species of plants, not including grasses, sedges, rushes, lilies and small ephemeral herbs. There is also a wide variety of mosses, liver-worts, lichens and fungi. A preliminary bird list includes 41 species with sightings of particular interest including nests of the Wedge-tailed Eagle and the Peregrine Falcon. Lyrebirds are reported to be numerous.

Because of its small size and the delicate nature of some of its precious contents, Morwell National Park will require very careful management. It will be essentially a day visitor park, and as such will provide an opportunity in a rapidly-developing area for local residents and visitors from further afield to enjoy a day in the beautiful Australian bush. It will, however be necessary to exercise control to ensure that the area is not overrun by human visitors, so that those who follow after us may share our heritage. Morwell National Park will also furnish botanists, plant physiologists and ecologists with some very useful reference data.

The Name. The name "Morwell National Park" was not chosen without careful consideration by the Place Names Committee and by the Authority, and ultimately by Parliament. "Morwell" is a very old name in the history of the district, although the early spelling appears to have been variable. Seemingly, Count Paul Strzelecki in April 1840, was the first white man to see Morwell River and his route took him only a few miles from the park. The first known record of the name "Morwell" is by C.J. Tyers, Crown Lands Commissioner for Gippsland, in his journal for 7th. February 1844. Under the circumstances, the name "Morwell National Park" seems very appropriate and there is no doubt that in the years to come this park will play its part in providing for the healthy out-door recreation of present and future generations and preserving a little more of our vanishing bushland".

---- L.H. Smith ----

LATROBE VALLEY FIELD NATURALISTS

CLUB.

Office-Bearers 1967 - 1968.

President: Mr. E. Homann, 84 Hennessey Street, Moe.
Vice-Presidents: Messrs. J. Peterson, F.E. Jones and G.T. Scanlan.
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Hon. Editor: Mr. G.T. Scanlan, c/o L.V.C. Hospital, Yallourn.

Hon. Secretary: Mr. S. Belgraver, 179 Lloyd Street, Moe.

Meetings:

General Meetings of Members are held on the fourth Friday of each month at the Yallourn State School, commencing at 7.30 p.m.. A programme of proceedings may be obtained from the Secretary.

Excursions:

These are in the nature of field days and are held, usually, on the day following the monthly general meeting. Some excursions take the form of 'camp-outs'. Again, the programme should be referred to. Visitors are always welcome at meetings and excursions.

Subscriptions:

The Annual subscriptions, which become due at the end of February in each year, are as follows:-

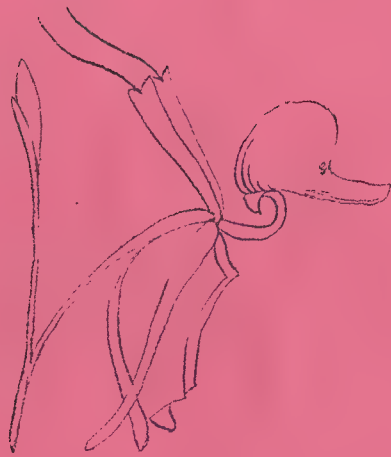
For Adults:	\$1.00
Juniors:	.10
Families:	\$1.50

The Latrobe Valley Naturalist:

This is the official publication of the Club, and is registered at the G.P.O. Melbourne for transmission by post as a periodical. Registration is a privilege, but requires that the magazine may be posted only to members who have paid an annual subscription, as above.

Contributions are invited from members of the Club on any aspect of natural history. Articles submitted may be of any length (within reason), and mss. may be written or typed, and may include drawings. They should be sent to:

G.T. Scanlan,
c/o Latrobe Valley Community Hospital,
YALLOURN. VICT.



PROTECT AND ENJOY

LATROBE VALLEY NATURALIST

ISSUE NO. 43. WINTER 1967.

Registered at the General Post Office Melbourne for
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YALLOURN. VICTORIA.

Latrobe Valley Naturalist.

Issue No. 43.
July 1967.

Editorial:

Dear Fellow Field Naturalists,

General Meeting Friday July 28th. The speaker at this meeting will be Mr. King who is well known to members, and who is to give a general talk from his vast experience of the things of nature.

The meeting will commence at 7.30 p.m. at the Yallourn State School, and members are asked to invite friends as visitors.

Excursions Saturday 29th. July: The July excursion to follow the General Meeting will be to Darlimurla, and will be led by Mr. King. The object is to view this interesting area which it is hoped to have reserved - as much as remains to be reserved. However, although much of the former glory of this area has been despoiled, it is still worth considering as a potential reserve, and much work has been done on the making of flora and fauna surveys. Members will enjoy the visit.

The meeting place is to be at the big tree at Darlimurla, at 10 a.m.. The route for most will be by way of Morwell, along the Thorpdale Road to the Mountain Hut Road where it turns off just after Driffield, then making off the main road at Delburn to travel about $2\frac{1}{4}$ miles on to Darlimurla.

Members requiring transport are asked to contact members in their own towns, or the Secretary, Mr. Belgraver.

Report of the Meeting of the Executive Committee held at the home of Mr. & Mrs. O. Thompson, Traralgon South, on Monday the 3rd. July:

Programme for 1968: Members will appreciate that the programme for each year must be considered and prepared as far as it is possible a long way ahead. Speakers and leaders for excursions must be approached, and this is not an easy matter where busy naturalists, with many demands upon their time are concerned.

Members are asked to take their suggestions for meeting lectures and excursions along to the next general meeting, or to send them to the Secretary. Any suggestion will receive careful consideration, and with the co-operation of members in this matter it should be possible to arrange a programme for all tastes and interests of a natural history nature.

Some indication of the number of members who would like to see no break in the sequence of meetings and excursions would be of assistance to the Executive.

Over ...

Editorial Cont'd.

Australian Conservation Foundation Symposium: Members may or may not be aware that this Club is a member of the Foundation, which had its beginning and is situated at Canberra, A.C.T. Some of us, as individuals, are also members, and it was reported to the Executive that Mr. Jim Peterson and the Editor had attended the first symposium to be held: and that at the University of Melbourne on Saturday the 17th. June. It was opened by the Foundation Patron, H.E. the Governor-General of Australia, and chaired, not unnaturally very competently, and genially by Sir Garfield Barwick, Chief Justice of the High Court of Australia. The presence and association of these two gentlemen may be taken to indicate the status of the organization, and the quality of the speakers its importance to an intelligent, trained and articulate part of the community.

Attendance at the Symposium was a stimulating experience, and it is felt that some at least of the knowledge of what is involved in the need to conserve was passed on to some of us lesser mortals, and that we were, at least, infected with some of the enthusiasm of the experts present. More of the Foundation and its aims in a later Naturalist.

Appointment of Mr. Graham Pizzoy to the National Parks Authority: Mention was made on the appointment, now a matter of a few months ago, of Mr. Pizzoy as a member of the National Parks Authority. Mr. Pizzoy is a member of this Club, and we congratulate him, and the Authority, on his appointment. Mr. Pizzoy is a source of inspiration to many of us, and it is recognized that his contribution to the cause of conservation by his writings, photography - still and cinematic - and his lectures etc., as well as his other qualities, fit him well for this appointment.

Classes for Members and Others in Natural History Subjects: A preliminary meeting with teachers and confirmation of what had been tentatively arranged by the Executive Committee has brought the classes much nearer. Three teachers have been appointed subject to other matters being satisfactorily concluded - such as a sufficient number of people enrolling, the provision of some finance by the Adult Education Association of Victoria etc. - and they are Messrs. Anderson and Chalmers, teachers at the Yallourn High School, both of them academically and personally well equipped to undertake the task, and Mr. Ken Bryant, a pharmacist, also of Yallourn. Mr. Bryant is an astronomer, a member of the Yallourn branch of the Astronomical Society of Victoria, and will give lectures on astronomy and the relation of the heavens to the earth on which we live. Mr. Anderson and Mr. Chalmers would, between them, cover classes in geology, botany and zoology.

There will, of necessity, be a nominal charge for the course of what is expected to be 20 classes, and it is hoped that from these classes members, and others who might wish to attend, would learn sufficient to enable them to continue with more advanced studies or to some specialized study. Those interested are asked to complete the form enclosed in this issue of the Naturalist and forward it to the Secretary, as soon as possible.

Editorial Cont'd.The National Trust of Victoria and its Landscape Preservation Council:

Dr. J. McAndrew of the Mineragraphic Investigation Division of the C.S. I.R.O. at the University of Melbourne, and a member of the Council, met Mr. Peterson on a recent Saturday, and Mr. Pizzoy later (having become mislaid on the maze of roads from Foster to Morwell) to have a preliminary talk on a projected Victoria-wide survey of the landscape to enable the preparation of a handbook to be used to further the aims of the Landscape Preservation Council.

It is proposed that the survey would be made on a regional basis, the State being divided into 10 regions with a further sub-division into sub-regions. Bodies such as the Latrobe Valley Field Naturalists Club would be looked to for assistance, and it is felt that we are well equipped to be of more than a little help in this task. It would be no more than an opportunity to fulfil some of the objects of the Club, and would be enthusiastically taken up by many members.

It is hoped that there will be more to report in the next issue.

"Wildflowers of Victoria" by Miss Galbraith.

It was reported that copies of the book would be available from the Secretary and Treasurer at the next meeting on the 28th. July.

'Camp-in' at Wilson's Promontory in November next: The week end of the 4th and 5th. of November next has been arranged for a longer excursion, Saturday to Sunday, at the Promontory.

As it will be necessary to book accommodation required during August, members intending to be there are asked to let Miss Nany Rossiter or Mrs. L. Padfield know, as soon as they can. This is a botanical excursion, at a most interesting season of the year for the purpose, and those members who have not been part of a previous stay there would be well advised to try and make it in November.

Transport to General Meetings and Excursions: Members are urged to make contact with other members if they are having transport difficulties for the purpose of attending either meetings or excursions. The Secretary would also be pleased to make contacts for new members or visitors.

Next Executive Committee Meeting: This is to be held at the home of Mr. & Mrs. Jim Peterson at 14 Barry Street, Morwell, on Monday 4th. August, at 7.30 p.m..

The Executive Committee will also meet at the home of Miss Galbraith, Tyers, on Monday the 17th. July, at 7.30 p.m... This is for the purpose of discussing further the arrangements for natural history classes with the three teachers.

BIRD-BANDING:Annual Report 1966/67.by F.E. Jones.

During the past year a total of 1,278 birds have been banded by the Latrobe Valley Field Naturalists Clubs' Bird-banding Group. The birds were of 30 species, and 125 birds banded in this and the previous two years were retrapped. The list shows the numbers banded but not quite all the retraps, for a few of these were of species not banded this year. All birds retrapped were again caught in the same areas where they were first caught and banded, and all birds on the list except the Purple-gaped and Yellow-plumed Honey-eaters were caught in our Central Gippsland banding areas.

Until 23 Oct. 66 all kinds were banded, but since then with the introduction of the project system our banding has been confined to Honey-eaters. Although this meant that many birds caught were released unbanded, the total banded is only 28 less than last year. This is due to the Autumn being a particularly good time for Honey-eaters in some of our areas. The most striking feature of the Honey-eater project was that while one of their major feed trees (Red Ironbark) was flowering well all through the Cowarr-Seaton District, the birds themselves were mainly confined to small areas. Why they should prefer certain areas is not clear, although these places seem to have two things in common:- they are within half a mile of water and there is plenty of undergrowth (mainly *Leptospermum ericoides*), apart from that the concentrations of Honey-eaters could be due to their gregarious instincts at this time of the year. These points may provide a lead to the factors that influence the movements and composition of the Honey-eater population, and the fact that they do gather in mixed flocks in confined areas increases our chances of retrapping birds that have moved from one site to another, and of tracing some of their movements in that way. Two new banding sites in the Glenmaggie-Seaton area have been added to our list to try to follow this movement in the future, and these with our other areas (some visited only occasionally) provide a constant week-end program.

Eventually, if it can be determined which areas have a special attraction for birds, and that such areas are indispensable to the well-being of some species, an additional claim could be made to preserve the flora of these places.

Apart from the introduction of the project scheme, the Division of Wildlife Research, C.S.I.R.O., is finding it necessary to tighten up on the record keeping methods of banders, and also the requirements necessary for the enrolment of new banders.

Regarding the R.A.I.U. Nest Record Scheme 43 cards were completed (19 by Mrs. Johnstone and 24 by myself), a great improvement on our previous efforts.

....

F.E. Jones

....

COPY OF RETURN OF SPECIES Banded. 1/7/66 - 30/6/67.
Name : F.E. Jones.

Permit No. : 316.

R.A.O.U. No.	Species.	Total banded.	Retraps.	Remarks.
322.	Kookaburra.	4.	-	
361.	Grey Fantail.	7.	1.	
380.	Scarlet Robin.	3.	1.	
382.	Flame Robin.	3.	1.	
383.	Pink Robin.	1.	-	
392.	South Yellow Robin.	9.	7.	
398.	Golden Whistler.	3.	1.	
405.	Olive Whistler.	1.	-	
421.	Eastern Whipbird.	2.	-	
470.	Striated Thornbill.	7.	4.	
475.	Brown Thornbill.	16.	2.	
486.	Yellow-tailed Thornbill.	1.	-	
488.	White-browed Scrub-wren.	2.	8.	
529.	Superb Blue Wren.	16.	14.	
549.	Orange-winged Sittolla.	1.	1.	
578.	White-naped Honey-eater.	263.	1.	
583.	Brown-headed Honey-eater.	26.	8.	
591.	Eastern Spinbill.	273.	12.	
614.	Yellow-faced Honey-eater.	115.	6.	
617.	White-eared Honey-eater.	10.	-	
619.	Yellow-tufted Honey-eater.	4.	2.	
620.	Purple-gaped Honey-eater.	1.	-	Mallee.
622.	Yellow-plumbed Honey-eater.	13.	-	Mallee.
630.	Crescent Honey-eater.	268.	11.	
631.	New Holland Honey-eater.	167.	17.	
633.	Bell Miner.	38.	-	
662.	Red-browed Finch.	15.	10.	
694.	Pied Currawong.	7.	7.	
702.	Grey Butcher-bird.	1.	-	
707.	White-backed Magpie.	1.	-	

Total. 1,278.

Number of Species 30.

LECTURE 'MARINE BIOLOGY' by Sir Robert Blackwood.19th. May 1967.Report by Miss B. Kemp:

Sir Robert spoke on the main groups of marine invertebrates to be found along our shores and illustrated his talk with some excellent slides of the creatures described. There was such a profusion of life that it was impossible to describe them all nor, for that matter, to record them here.

Along the shore one found different marine life at different levels - some lived above high tide level, some half way between high and low tide levels, others nearly always in water or in a rock pool, and again others always in sea water at and below low tide level. Wave platforms were good areas in which to make an examination of marine life - there was a particularly good one at Pt. Lonsdale with many rock pools and muc seaweed. The type of rock in the area was important - granite country was not very good for marine creatures to attach to, basalt and sandstone being more attractive.

Then came slides and descriptions of creatures belonging to different phyla of marine life, commencing with the simpler forms: -

PORIFERA (Sponges): These are really a colony of little animals or cells joined together. The surface is porous, the body riddled with a system of canals into which sea water is sucked, microscopic life and oxygen extracted, and the water then ejected through larger openings. They exist below tide level, the rock encrusting variety usually about 2 - 4 feet below the surface and often brilliantly coloured.

COELENTERATES: Hydroids, Anemones, Corals, Jellyfish belong to this phylum and all have the same characteristic - they are hollow-bodied, have tentacles about a mouth opening, and sting!

Hydroids: These are tiny basic creatures with eight sticky tentacles. Generally the body is cylindrical with an opening at one end (the mouth) surrounded by tentacles, and the animal has the ability to sting in order to immobilise its prey. Some live in colonies like bits of fern attached to rock, each little branch along the stem containing a tiny animal.

Jellyfish: Has a semi-transparent bag (float bladder) on top which it can move to propel itself, and tentacles armed with stinging cells to catch food. Examples are the Sea Wasp, Portuguese Man of War (this one's sting is dangerous to humans), and Cyanea which is a reddish colour, and also packs a nasty sting.

Sea Anemone: These are very pretty flower-like creatures when open. They have an outer and inner wall with digestive and venous system between, and sticky tentacles. The Red Waratah anemone looks like a little ruby red blob of hard rough-skinned jelly when closed. Others have stripes - one grey with silver edge and tentacles. Sea anemones can be kept quite well in a salt water aquarium, are easily fed (on shrimp or chop) and, if given a regular supply of sea water, will expand in size and look very attractive.

Over ...

Marine Biology (Cont'd)

Corals: These tiny Polyps are closely related to the Anemone, and each secretes a compact skeleton of 'limestone' in which it lives, emerging to wave its tentacles about in search of food. There are a few corals in Victorian waters -- the Brain Coral is fairly common, as is also the Gorgonia, a graceful fan coral of many colours. Slides showed colours of orange, pink, grey, and also a pink branched coral with tiny white heads sticking out.

VERMES (Worms) - Annelida: These are the ringed or segmented worms. Slides showed the homes of Galeolarium worms, a mass of tiny white tubes $1\frac{1}{2}$ " x $1/16$ " diameter encrusting rocks; the Pen worm which lives in a tube like a very long icecream cone, about $2\frac{1}{2}$ "; Scale worm, hardish and scaly, with little feet for moving; another tube worm which lives in a tube 6" - 8" long, and sends out tentacles like purple hair or wool opening out in all directions, and many other worms too numerous to mention here.

ARTHROPODS: Next came slides of Arthropods ('joint-foot') represented by the Crustaceans such as crabs, lobsters, prawns etc, which have a hard outer shell as well as jointed legs. There was a Crab with a sponge on its back -- the sponges continue to grow to a good size. Seaweed Crab, whose body was a mass of little groups of spines each curved over at the end like a fish hook. When it sheds its skin (moult) it takes the seaweed off the old skin and replaces it on the new. There was a pretty pale-blue/pink Sand Crab; then a Rock Crab found on wet rocks; a Pebble Crab, the male of which has long front legs with claws while the female has small front legs; Weed Shrimp, almost transparent; Prawn Killer (Squegger), a slow moving creature, coloured orange with lobster-like tail and front pairs of legs like plates; Mantis Prawn (Squilla), semi-transparent; Bass Yabby which burrows in muddy flat places and has one large claw; a Hermit Crab whose abdomen is not covered by a shell -- soft bodied, it lives tail first in a discarded mollusc shell, dragging itself (and its home) around by the front legs; a bright red Hair Hermit Crab; a Mason Hermit Crab which bores a hole in stone and whose limbs look like masonry; and tiny Sea Spiders.

MOLLUSCS: The mollusca constitute one of the largest divisions of the animal kingdom, with over 80,000 different species, including most of the so-called shellfish -- in the sea, on the land, in lakes and streams! They are soft-bodied animals and have no skeleton whatsoever, nor are they segmented like the Arthropods or the Annelida. Now followed a number of slides depicting various species:

Chitons: Meaning 'armour-plated', being flattish domed oval creatures found under stones just below tide level; Duck Shell, its large velvety black foot offsetting the flat white shell; Ear Shell (Haliotis), also called Mutton Fish and Abalone; Sand Snails; Scallop, with a lovely fan-shaped shell.

Sea Slugs (Nudibranchs), belying their name, are most beautifully coloured, that shown was gold with bright blue spots, and with the brilliant blue many-branched gill structure at the rear.

Marine Biology (Cont'd).

Cowries: When crawling, the mantle comes right around the shell which is being continually built up by deposits from the mantle.

Sea Hare with bright orange egg ribbon. Belying its name, this creature crawls very slowly. The shell is internal to the body, just under the skin.

Squid, with irridescent body with black and yellow spots. It has ten suckered arms, two of which are longer than the other eight, and swims using its fins or by under water-jet propulsion.

Octopus: All octopuses have eight suckered arms, a beak to tear food, and a poison gland for narcotising animals (a small ringed octopus recently bit a young soldier at Sydney, causing death in a matter of two hours). They can also move by jet propulsion. Two slides were shown, one of O. maculata, white with blue spots outlined with gold and brown, and one of O. super ciliosis, showing big eyes, and large suction pads on the arms.

ECHINODERMS: The members of the phylum Echinodermata have spiny or rough skins (from which they derive their name) and a radial symmetry of design, and include the Sea Stars (Starfish), Brittle Stars, Feather Stars, Sea Urchins and Sea Cucumbers. Slides were shown of a number of these and included the following :-

Starfish (Asteroides): Here we saw stars of many different colours.- A. gunnii, dark purple; a five-sided Biscuit Star, a bright red star with gold patterned centre, another textured with blues; a Sun Star with 11 - 13 arms covered with many spikes and processes.

The starfish can protrude its stomach through its mouth to envelop food and digest it outside the body. It moves on tiny suckered feet - tubes - which emerge from grooves on the underside of the arms.

Brittle Stars (Ophiuroides): These have more of a central disc-shaped body, with long spider-like legs which are easily broken, but which grow again.

Feather Stars (Crinoidea): These have many arms that look like feathers. (The name of this class of marine animals 'Crinoidea' is from the Greek, meaning 'resembling the lily' and is of particular importance and interest because of the occurrence of, usually, abundant fragments of stems and other of the hard parts of fossilized representatives of the class in sedimentary rocks of such areas well known to us as Tyers, the Thomson River, Buchan etc.. Ed.)

Sea Urchins (Echinoidea) have beautifully patterned, spiny, near-spherical shells, which range in colour from purple to white. They move on transparent suckered feet which emerge from holes running meridian-wise around the shell. The central mouth underneath has five teeth.

The Pencil Urchin has long spines like slate pencils.

Sea Cucumbers (Holothurians). A slide showed one like a pale blue cucumber with many sucker feet and deep blue tentacles underneath around the mouth. If unduly disturbed they throw out their insides (to escape enemies) and grow a new set in a few days.

Marine Biology Cont'd)

CHORDATES: The Phylum Chordata includes the vertebrate animals, i.e., those with backbones, or spinal columns, and slides were shown which illustrated several of these, which can be found along the seashore. One of the lowest forms is the Sea Squirt (an Ascidian) included because, at its free-swimming (larval) stage, it has the beginnings of a backbone (notochord). Its potato-like body, covered with a leathery skin, has two openings - water is sucked continually through one into the internal parts, where sea life is extracted for food, and the water is then ejected through the other. Another slide showed a number of Sea Squirts joined together in a yellow mass - a colonial or Compound Ascidian.

Sea Tulip another Ascidian, orange-coloured, on a stem 6 - 8 inches long, was also shown, and the Sea Horse (Hippocampus) which is a true fish. In this species, the male takes the newly hatched young into his pouch and looks after them.

Final few slides showed a Toad Fish, a mournful looking Porcupine Fish, and a female (striped) Cow Fish in which the male of the species is very ornate.

Time brought to an end a very interesting lecture which provided a feast of colour and information that made us eager to try out new found knowledge on the morrow's excursion which Sir Robert was to lead. On behalf of the members and visitors present the lecturer was thanked for opening up the wonders of the seashore and bringing a new dimension to our knowledge and work within the Club.

.... B. Kemp

In connection with her report above, Miss Betty Kemp included the following note: - "The foregoing is by no means a complete report of the profusion of marine life illustrated, as it was impossible to describe them all, but anyone who could find the time to read Rachel Carson's 'The Sea Around Us' - a very readable and fascinating book, would be well rewarded. Her descriptions of marine life along the eastern coast of U.S.A. and their ways of living combine both poetry and drama - and no doubt the rest of the book is in this vein. It will be found in every library - a must ! "

And a Note by the Editor: Among other attainments, Rachel Carson learned to know the sea intimately during her time as genetic biologist and later editor-in-chief for the U.S. Fish and Wildlife Service and while studying offshore life under a Guggenheim Fellowship, and again while during research at the Marine Biological Laboratory in Massachusetts. Her knowledge of and interest in natural history is formidable and intense - her acclaimed (and officially largely ignored) 'Silent Spring' indicates her dedication to conservation - and she writes for all to read and understand. 'The Sea Around Us' is almost certainly to be found in Victorian Public Libraries, and it could well be included in the F.N.Club library.

(Ed.)

EXCURSION TO VENUS BAY Saturday May 20th.

Led by Sir Robert Blackwood and reported by Mrs. Lorna Padfield:

The May excursion was to have been to Waratah Bay, but a change of plans took members on from the meeting place at Meeniyah to the area known as Eagle's Nest Point on Venus Bay. The name Venus Bay was given to the bight by Matthew Flinders, being the name of a boat commanded and sailed by his friend and colleague Surgeon George Bass.

Eagle's Nest Rock, which gives a name to the area is a double-peaked rock lying about 300' from the shore and at about three miles eastward from Cape Patterson and, although only about 60' high, is the most conspicuous feature on this part of the coast and is an aid to navigation by vessels sailing to Anderson's Inlet, on the coast of which lies the small township, once port, of Inverloch, about six miles from the Rock. The coastal cliffs here show the effects of extensive erosion by the sea, and Eagle's Nest Rock is itself a remnant of the soft sedimentary rocks forming the former coastline.

The parking area was comparatively high on the headland, and here the ten or so cars of the party were left while their occupants climbed warily down the slippery path to the beach below. The tide had receded at about midday and the time we had arrived and this made more readily accessible the many rock pools and crevices of the sandstone sea floor and the animals which lived among the rocks and the plants growing and forming veritable gardens, sights of much beauty.

Sir Robert Blackwood was the leader of the excursion to the seashore, and showed members of the party where to look for and find some of the marine animals of which he had spoken on the previous night. An experienced searcher of the things of the sea, he was the more suitably attired to withstand some of the hazards of stepping into or falling into the deeper than they appeared rock pools. We were told to look in the pools, to turn over rocks and explore their crevices. It was desirable to return the rocks to their original positions in order not to destroy the animals which lived or sheltered beneath.

Plentiful were the worm tubes of the *Galeolaria* whose white lime encrustations almost completely covered rocks near the uncovered sand of the seashore. The tubes were from $\frac{3}{4}$ " to 1" long and about 1/10th" in diameter.

We saw Limpets. The Slit Limpets are shells which look very much like a chinaman's hat - grooved and coloured, but not brightly. The limpet attaches itself to a rock by means of a 'foot' which acts as a kind of sucker. The Slit Limpet is a false limpet belonging to the same family as the Key-hole Limpet, which has a small hole which resembles a key-hole. The Slit Limpet is characterized by a small slit in the shell as a result of the mantle honing a slit in its margin. The mantle of the shell secretes the material that forms the shell itself - it covers the shell and in some cases acts as a form of camouflage.

Limpets move about fairly well over the rocks by using the feet which lie beneath the stomach and return to the same spot from which they left for the journey, a remarkable example of homing. Their food is usually seaweed.

Another shell creature to be found in great numbers was the Chiton, or Coat of Mail Shell. They adhere to the underside of rocks like the Limpets and have eight sections in the shell which is surrounded by a muscular layer called 'the girdle'. Chitons are usually recognized by the linear designs on the beautiful shell. The girdle on some of the shells looks like the skin of a snake; while others have a furry looking girdle.

The Isopod or Sea Lice and the Amphipod or Sand Flea: These were small creatures which we saw on the sand and also on the undersides of rocks, and around the piles of jetties etc.. The amphipod is compressed laterally and cannot walk on legs satisfactorily, therefore they have a sideways leaping movement, from which they derive the name 'Sand Flea'. The Isopod is flattened in a more usual manner and is related to the Slaters we know so well on land. When taken in the hand the Isopod will roll up on itself.

Star Fishes: These were found in the rock pools and we were able to see several different species one of which was a red 5-pointed creature about 6" in diameter. We put this one on its back in order to observe the process of turning over. The tentacles which are on the underside gradually came feeling out for a section of rock, allowing the creature to cling to it and slowly right itself again. We saw other Star-fish with more than 5 points, and some were again more furry looking, but beautiful in colour. Also the smaller star-fish (Patriulla) with arms not so clearly defined and having more of a hexagonal shape. Some of these seen were in lovely colours.

Sea Urchins were of the same family as the Star-fish and used the same method of movement - by their tentacles. By holding up a dead Sea Urchin we could see the tiny holes through which the tentacles passed.

Sea Cucumbers or Holothurians: These soft-bodied, sausage-like creatures could be mistaken for large worms. They are actually however of the same family as the Sea Urchins. They are of the same group of the Boche-domer or Trepang of the northern Australian waters. The Sea Cucumber has the extraordinary facility of being able to eject most of its intestines and to grow them again. We saw a representative of this group.

Sea Hare: Some imagination was needed to see any resemblance of this creature to the hare. The name refers to the shape given by the four tentacles protruding from the head and folding over, having the appearance of a rabbit's ear. Sometimes brightly coloured, the specimen found here was brown and green. Living mainly on seaweed the Sea Hare progresses by means of an elongated foot.

The Sea Slug. - Nudibranch. The specimens collected were bright yellow and from $\frac{3}{8}$ " to $\frac{5}{4}$ " long. They need to be seen moving in the water in order to appreciate their real beauty.

Excursion Cont'd.

Sea Anemones: Several of these beautiful creatures were seen, and the most common seemed to be the Red Anemone. Looking like balls of red velvet in the rock pools until the pink tentacles were opened out, they then took on the appearance of an opened flower.

Another larger specimen had a brown base and pink tentacles, while the tentacles of another were pale-grey. The tentacles exude a sticky substance and are the means by which food is obtained by the animal.

Many more species of marine animals were seen by members and the loader collected a formidable array of specimens in the way of an experienced marine biologist. This area was shown to be a fruitful source of specimens at the right state of the tide and is recommended to those who are anxious to do more in this vastly interesting field of study.

Time passed as quickly as it does when one is so greatly interested in the wonderful things of nature and a long string of people gradually wound their way up the track to the cars. Mr. Ian McDonald said a few appropriate words of thanks on behalf of members to Sir Robert Blackwood, and there was a general heading for home.

.... L. Padfield

AN ANTHROPOLOGICAL NOTE:

To those interested in the pre-history of the Australian Aborigine news that carbon dating of bones, artefacts and charcoal found during this year at the site of earlier finds (the Keil skull) at Keilor, north of Melbourne, has added 6,000 years to the previous dating of 25,000 years of a skull discovered in the early 1940's, is exciting.

Members of the Archaeology Society of Victoria have been working on this area under the leadership of Dr. Gallus for some long years, and this latest authoritatively confirmed dating must be of great satisfaction to them. Of course, 31,000 years of pre-history is apparently the present known position. Future discoveries, achieved only with a tremendous amount of work and over a long period of time might alter the time factor considerably.

.... G.T.S.

FOSSILS: Report of a Lecture to the Sale Field Naturalists Club.
by Sale Member Mrs. Enid Nownham.

We were fortunate at our last F.N.C. meeting in Sale to hear a lecture by Mr. T.A. Darragh, Curator of Fossils at the National Museum. Because of the cold night only a few members attended, but those who did so were rewarded with a most interesting address.

Mr. Darragh asked the question: "What are fossils and what do we look for?" He stated that once almost anything that was dug up was considered to be a fossil, including minerals, and even pottery. However, only those plants or animals that lived prior to recent or historical times were now considered to be fossils.

The study of fossils is called 'Palaeontology' meaning 'ancient life', the study of plants being known as Palaeobotany and that of animal fossils as palaeozoology. There are several other subdivisions of fossils including those which need to be studied under a microscope.

Many places in Victoria are rich in fossils, and in the Limestone Quarries at Dutson in Gippsland can be seen species of Bryozoa, Gastropods, Calcareous Algae and Sponges, amongst others. These date back to the Miocene Period. In the Devonian rocks of the Walhalla area are remains of Crinoids, flower-like marine animals, and the Port Campbell limestones contain fine specimens of fossil crustaceans.

Interesting specimens of terrestrial fossil animals have been found in many parts of the world, the best preserved among them being the Woolly Mammoths of Siberia and Alaska. Insect fossils have surprisingly been found, trapped in the resins and gums of trees. These have been plentiful in the Baltic area, but have also been found in the Yallourn Brown Coal measures. The soft parts of animals are seldom found, except in these circumstances.

Another method of preservation has been that of replacement of the hard parts of the animals through the agency of silica or calcium carbonate. In the former opalization takes place, the shape of the parts being retained. Sometimes the calcium carbonate in shells is replaced by iron sulphide. Casts of tracks or trails of long dead animals may also be found, and these have provided a great deal of valuable information of species of animals, including the giant reptiles of the Mesozoic Era.

Index fossils, so-called because they lived for a relatively short geologic period of time, are of value to geologists in helping to determine the age of rocks in any part of the world, and assist in disclosing the climatic conditions, and the nature of the natural features at any period of time.

Mr. Darragh, in conclusion, mentioned that fossils are found only in the sedimentary rocks, such as shales, limestones, sandstones, particularly those of a marine origin. He advised those who were interested in collecting fossils for identification purposes to secure the whole of the rock in which it was embedded, in order that any impressions, markings and projections might be preserved.

A REVIEW:"WILDFLOWERS OF VICTORIA" by Miss Jean Galbraith.

As Editor of the Naturalist, I have received a review copy of the long-awaited revised 3rd. edition of Miss Galbraith's "Wildflowers of Victoria", from the publishers Longmans, Green & Co. Ltd..

This valuable native plant reference, long out of print, comes now completely revised and an even more important guide to much of the flora of Victoria than were the earlier editions. The beautiful line drawings by Ruth Iggsten are included, as well as a number of black and white photographs - there is an extensive glossary and a 'guide to sections' - all of which, together with the narrative descriptions, must go a long way to making identification much easier.

This is, I believe, essentially a field guide, and has been prepared for that purpose. The section on how to use the book seems to make identification of plants in the field ^{easy} and, although that is only partly so, the illustrations, the guide to sections, and the keys provided certainly simplify the task in respect of a large number of plants.

The book carries authority - Miss Galbraith gratefully acknowledges the generous assistance of Mr. Norman Wakefield, well known naturalist; and that of Government Botanist, Mr. J.H. Willis, who is also an author of note and who has provided the introduction to the work. I feel that I cannot do better than to quote from his introduction: -

"The authoress is a competent field botanist whose crisp and accurate descriptions emphasise those very features by which a plant may be most easily recognized. Excellent photographic illustrations, mainly by the late F. Bishop and the late H.T. Reeves, add much to the value of the text. Obviously it would not be possible to deal with all two thousand and more species of the Victorian flora; but conspicuous and typical examples have been chosen from different plant families, and these are discussed under a hundred headings botanically arranged (from simple and primitive to more recent highly specialized flowers). Miss Galbraith's work should go far in supplying a long-felt want ..."

In the Spring of 1966 I travelled in the company of Miss Galbraith from her home at Tyers to Bairnsdale, along the Omeo Highway to Omeo, and thence along the Alpine Highway which traverses the High Plains country, snaking the road which runs high and scars Hotham Heights, past Mt. St. Bernard and down to Harriettville to turn on the western bank of a fast-running Ovens River. There followed a drive over the Tawonga Gap to Mt. Beauty. The pleasure of a memorable journey was in the glorious weather, the scenery, especially in the mountain country where the summits and the southern slopes of the high hills were still snow covered. There was too the enthusiasm of Miss Galbraith in a reunion along the way with many of her plant friends, to whom I was introduced. Referring now to her "Wildflowers of Victoria" reminds me vividly of Miss Galbraith during that leisurely journey, showing a deep knowledge and love of plants and a great concern for their preservation - her great wish for others to know and understand and a desire to help them to learn ...

The retail price of the book is \$4.75 and copies may be obtained from the Secretary and/ or Treasurer.

LATROBE VALLEY FIELD NATURALISTS

CLUB.

Office-Bearers 1967 - 1968.

President: Mr. E. Homann, 84 Hennessey Street, Moe.
Vice-Presidents: Messrs. J. Peterson, F.E. Jones and G.T. Scanlan.
Treasurer: Mr. E. McElroy, 35 Latrobe Street, Morwell.
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Hon. Editor: Mr. G.T. Scanlan, c/o L.V.C. Hospital, Yallourn.

Hon. Secretary: Mr. S. Belgraver, 179 Lloyd Street, Moe.

Meetings:

General Meetings of Members are held on the fourth Friday of each month at the Yallourn State School, commencing at 7.30 p.m.. A programme of proceedings may be obtained from the Secretary.

Excursions:

These are in the nature of field days and are held, usually, on the day following the monthly general meeting. Some excursions take the form of 'camp-outs'. Again, the programme should be referred to. Visitors are always welcome at meetings and excursions.

Subscriptions:

The Annual subscriptions, which become due at the end of February in each year, are as follows:-

For Adults:	\$1.00
Juniors:	.10
Families:	\$1.50

The Latrobe Valley Naturalist:

This is the official publication of the Club, and is registered at the G.P.O. Melbourne for transmission by post as a periodical. Registration is a privilege, but requires that the magazine may be posted only to members who have paid an annual subscription, as above.

Contributions are invited from members of the Club on any aspect of natural history. Articles submitted may be of any length (within reason), and mss. may be written or typed, and may include drawings. They should be sent to:

G.T. Scanlan,
c/o Latrobe Valley Community Hospital,
YALLOURN. VICT.



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Latrobe Valley Naturalist

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YALLOURN.

VICTORIA.

Issue No. 44.
August 1967.

Editorial:

Dear Fellow Field Naturalists,

General Meeting Friday 25th. August: The interesting part of this meeting will be a selection of Nature films chosen from a list prepared by the Executive Committee. These will be obtained, it is understood, from the State Film Library by courtesy of the Librarian (Mr. Ponting) of the Yallourn Public Library.

Members can be assured of their suitability and value to members from the educational as well as the entertainment points of view.

Excursion Saturday 26th. August: The August excursion is to be to the Stoney Creek area to study birds in the field, with Mr. Frank Jones as the leader. Mr. Jones has spent much time bird-banding as well as observing birds during the seasons of the year in this area, and it is hoped that conditions will enable a successful day with the birds.

Although the road through Cowarr Weir will be closed to traffic access to the area will not be affected, and members are asked to meet at the 'Oasis' store at Toongabbie at 10 a.m. on the Saturday.

Notes of the Executive Committee Meeting: This was held at the home of Mr. & Mrs. Jim Peterson, Barry Street, Morwell, on the night of Friday the 7th. August. Among the matters dealt with or discussed were the following:-

Photoflora 1968: A further report was received to the effect that greatly increasing interest was being taken in this annual event. Eighteen requests from as many separated centres for showings had so far been received. It is hoped that as many L.V.F.N.C. members as possible will endeavour to submit entries to Photoflora.

The Gippsland Earthworm: The late Mr. Crosbie Morrison stated that this giant worm had been known to exceed ten feet in length when stretched and of a thickness to equal that of a man's thumb. The Director of the Victorian Fisheries and Wildlife Department is seeking information from interested persons sighting the earthworm, or having seen evidence of its occurrence.

It is believed to have been restricted to the swampy or marshy areas of South Gippsland - by some, including Crosbie Morrison to be 'outmoded remnants of a bygone age' as are some of Australia's 'living fossils' the platypus etc.. It is said to have a body of a light slate grey colour with the first six inches from the head end being black.

Over ...

The Gippsland Earthworm. (Cont'd)

It is feared that the use of chemical fertilizers and pesticides will hasten the trend to extinction of this interesting creature, named by Professor McCoy *Megascolides gippslandicus* - it is probably already rare, although reports may prove this to be mistaken.

If you have anything to report please do so direct to the Director, Fisheries and Wildlife Department, Melbourne.

Programme of Meetings and Excursions for 1968: It is hoped that suggestions will be put forward by members at the August general meeting. This will then make it possible for the Executive to prepare a tentative programme at the September meeting. The programme can be regarded as tentative only until prospective speakers and leaders have intimated agreement or acceptance of Club invitations.

Elsewhere in this issue are some suggestions for excursions from Mrs. Hague of Cowarr. The excursion which she recommends taking in the area including Lake Tyers etc. to the Ninety Mile Beach is of particular interest to the writer because it includes Red Bluff, the first and only break in the long stretch of the beach, and which appears to have what are now only the sorry remnants of an aboriginal kitchen midden, with evidence of long periods of shell gathering and feasting at many fires - charcoal encrusted shells of some considerable thickness being too quickly dissipated by picnickers and fishermen.

Natural History and Flora Exhibition: The Victorian Field Naturalists Club will hold its annual exhibition in conjunction with the native plants display by the Society for Growing Australian Plants at the Melbourne Town Hall (in the Lower Town Hall) on Monday, Tuesday and Wednesday the 28th., 29th., and 30th. of August from 10 a.m. to 10 p.m. on each of the three days.

Each group of the V.F.N.C. will be represented by exhibits, as usual at the exhibition, and this is an event which should be regarded as of great value to those who find it possible to attend.

Next Executive Committee Meeting: This has been arranged to be held at the home of Mr. & Mrs. Ted McElroy, of 35 Latrobe Avenue, Morwell. The Meeting will commence at 7.30 p.m., and once again it is stated that any interested members are invited to attend.

At the time of writing this Mr. McElroy is a patient in the Latrobe Valley Community Hospital. Mr. McElroy has been on the sick list for some time, and it is hoped that this period of treatment will return him to good health. He has the good wishes of all members of the Club.

Miss Jean Galbraith's 'Wildflowers of Victoria'. This is now on the shelves of booksellers, and the Secretary will have copies at the general meeting for those members who have already placed their orders. Reviews have appeared in several publications, and that of Peter Alston, 'Age' gardening writer, is of interest: "in a somewhat different category from the above is the third edition of 'Wildflowers of Victoria' by Jean Galbraith. This has become a standard work for the native plant lover and this revised edition with its extensive illustrated glossary is an ideal aid to identification and guide to the habits of our Victorian plants.

The special value of this book lies in the fact that it is an authoritative botanical work, yet one which is fashioned in a style to fill the requirements of the amateur botanist and plantsman."

Classes in Natural History: There has been, so far, a disappointing response to the request for an indication from members of their desire to participate in the Natural History classes. Perhaps there might be sufficient replies by the date of the August meeting to enable a decision to be made on whether or not the classes may be conducted. If the present opportunity is not availed of - that is, the availability of competent teachers, and anticipated financial assistance from the Adult Education Association, it might be much more difficulty to arrange such classes for some considerable time ahead. This would be a great disappointment to several of the members who have worked towards effective knowledge and understanding by members in the things to be seen in the field.

The Song of the Lyrebird: Fairly recently I 'fluked' seeing a 25 minute T.V. Film, filmed and commentated (I believe) by Graham Pizzey on the repertoire of the Lyrebird, and its inimitable powers of mimicry. One could have been sceptical of the great variety of bird songs and calls having been delivered by the one bird. However, on Sunday the 25th. June I was at the site of the old Maidentown, east of Walhalla, which has been referred to as a former suburb of the gold town in its prosperity, and had stopped just beyond at the bottom of a steep, slippery rise which my car had not been able to climb. Sitting on a rotting tree trunk peeling and eating an apple in a quiet that could be felt I heard the unmistakable call of the male bird displaying on the hill to the south-east - quite close to me but unseen. Then came the calls of the Kookaburra, the Currawong, which are plentiful in the area, the Little Wattle-bird (or so I believed), Cockatoos, Parrots and other calls which I could not identify. They were all undoubtedly made by the same bird. This was an experience which made the day's outing really worth-while - and removed any scepticism that might have remained after seeing and hearing the very fine Graham Pizzey film.

It is of interest to be able to report that this much ravaged area shows some signs of regeneration - tree-ferns and other associated vegetation showing in some of the gullies what could result if the country were to be given a real chance !

FLOWERS OF THE PINE FORESTS.Ellen Lyndon.

The first Sunday in August was a delightfully sunny day and, for us, one well spent, for we went wandering in the great maze of the pine plantations that stretch for miles along the hills from Rosedale to Longford. At this latter end we met with several small mobs of Emus which were not unduly nervous, although they certainly ran off with their grass skirts rustling round their long black legs, but soon resumed a leisurely afternoon stroll through the bush.

Under newly planted pines the sand is still bare and unclothed while under the mature stands that exclude the sunlight the earth is more or less bare and lifeless. But in between these two extremes where pines are waist high or even taller, the earth can be a garden of colour with its thriving native shrubbery. This fact may not please foresters but I loved it! Never have I seen such lush Correa bushes, dark green and glossy and wide-spreading, just smothered with red bells. Surely one of our most desirable native plants, growing so very easily from cuttings poked into any sort of earth, and flowering all winter.

There were two pretty wattles adding their gold to the scene - *Acacia oxycedrus*, the Spike Wattle, furiously prickly but gloriously golden with its long catkins of bloom; and *A. suaveolens*, the softer and paler Sweet Wattle that is also pleasantly scented. Then the Bear Heath, *Leucopogon ericoides*, dark red while still in bud, but pale pink to white when the flowers open wide. These three hardy species made a lovely picture intermingled in color amongst the dark pines.

I went looking for the fungi in the aisles between the taller pine blocks but found only a few wood destroying sorts busy reducing the fallen branches. But any spot of ground which was open was literally carpeted with the leaves of the smaller orchids. Tiny rosettes of a Greenhood; troops of Stately Helmets - some in flower, very robust and stately indeed. Clouds of Mosquitoes, *Acianthus exertus*, covering the ground with green hearts that are reddish on the lower side, with here and there a flowering stem. I came away reluctantly, feeling that perhaps, after all, all is not lost in the pine deserts, and the extermination not nearly so complete as that which has taken place in our highly improved milk, meat and onion districts.

Ellen Lyndon.

Suggestions for Excursions During 1968: by Mrs. M. Hague.

An interesting area for naturalists would be the extensive natural bush situated between Tooloo Arm, Lake Tyers and the Ninety-Mile Beach. The bush teems with natural flora and bird life - there are too Kangaroos, Wallabies and other animals. On a piece of land jutting into the Lake called 'Devil's Hole' fossils are to be found.

A weekend would provide little time enough to see all there is to be seen. The beach joins the Lake at the sandbar, as most readers will know. The way in is through Nowa Nowa where there is a turn right into Lake Tyers House Road. Lake Tyers House is an old Guest House and was once the Coaching Hotel during the times when coaches ran from the goldfields by way of Orbost to Lakes Entrance. Since the owner died last year the place has become rather dilapidated, but I daresay permission would be available for any one to camp there by his son, Mr. M. Camilleri - failing that of course, there is the Nowa Nowa Motel, and a good camping ground.

I asked my friends who live at Lake Tyers House Road if they would like a party to visit their area and Mr. Roberts said that he would accompany the group. He is close on 70 years (but very spritely) and as he was born there knows all the history of the place, which I am sure is intensely interesting. The distance altogether would be perhaps a few more miles longer than it would be to Buchan. I had a few most enjoyable days there very recently, visiting the old coaching house, the shrines overlooking the Lake; the orchard and the old glass-making place; the beach; the 'Devil's Hole' (which is very, very deep); the Pilot Station and Mystic Lake. It is so much better when there is someone with you who knows all about these places. At one time the Lakes were a hive of activity with steam boats carting all kinds of freight, and also the pleasure boats.

For a one day excursion which would not be too arduous my suggestion would be around Cowarr Weir, visiting the breakaway (the river now flows down Rainbow Creek) where the gash and erosion of the 1962 flood can be seen. Many different kinds of stones can be found in the creek. Stony Creek could be visited - the route I would suggest is to Cowarr Weir, through our paddock and over Rainbow Creek down to Old Thomson River (Salamanders' Hideout), then to a paddock on to Seat-on Road belonging to my sons, where many wildflowers grow. Springtime would be a must for this trip - perhaps November or October - and then home via Stony Creek.

----- (Mrs) M. Hague -----

(Mrs. Hague has also not been well enough to attend excursions this year, but hopes to join the excursion to Wilson's Promontory in November. It is sincerely hoped that Mrs. Hague will very soon be well enough to join other members in the field. (Ed)).

Plant and Fauna Surveys of the Darlimurla Area: Mrs. Ellen Lyndon has spent a great deal of time, sometimes alone, and on other occasions in the company of members of this Club or others in the conduct of a survey of the plants of the Darlimurla area, some part of which it is hoped to have reserved. Mrs. Lyndon's comprehensive list, after checking and perhaps added to by Mr. Graham Marshall and other members will be printed for the information of members and any others interested.

The Mammal Survey Group of the Victorian Field Naturalists Club has undertaken a survey of the mammals - the group includes dedicated amateur and professional workers, with Mr. Bill King, a recent Club speaker and excursion leader as the group Chairman.

The list which follows is of those mammals which have been positively identified. There are at least three other mammals suspected of being here but have not been included in the list: -

Black-tailed Wallaby.	Wallabia bicolor
Pigmy Glider.	Acrobates pygmaeus
Greater Glider.	Schoinobates volans
Ringtail Possum.	Pseudocheirus laniginosus
Mountain Possum.	Trichosurus caninus
Allied Rat.	Rattus assimilis
Eastern Swamp Rat.	Rattus lutreolus
Eastern Water Rat.	Hydromys chrysogaster
Dusky Marsupial Mouse.	Antechinus swainsonii
Brown Phascogale.	Antechinus stuartii
Common Wombat.	Vombatus hirsutus
Koala.	Phascolarctos cinereus
Short-nosed Bandicoot.	Isodon obesulus
Long-nosed Bandicoot.	Perameles nasuta
Echidna.	Tachyglossus aculeata
Little Bat.	Vespadelus pumilus

The Mammal Survey Group considers that such a collection from an area of what is only a few hundred acres represents one of the richest they have yet worked in.

The above information has been provided by Mr. Jim Peterson, who has been in close contact with the mammal survey group, as well as the workers on the flora of the area. (Ed).

MR. STERKENBERG AND THE LACY WEDGE-FERN.by Ellen Lyndon.

Congratulations to Mr. Sterkenberg on his recent green gold strike and on his adding another rare one to the census of local flora with the Lacy Wedge-fern. This is, I think, the fourth record for the State and the third occurrence in man-made excavations.

The new National Park is very much in my mind now that the bulldozers are busy on the adjoining subdivisions, and this week I set out to see if I could locate the boundary pegs. Instead I added another three ferns to the list there. Only one however, is in any way uncommon and this is Tmesipteris ovata, the Oval Fork-fern. This one belongs to one of the oldest living orders of plants. It consists of a leafy unbranched stem, six inches or less in length, with lobed spore cases attached to forked bracts. The midvein of each narrow leaf extends into a sharp terminal spike. The twin sporecases are perfectly round.

There is a single record of this small fern in the Dandenongs during the last century but otherwise it is recorded very occasionally in far eastern Victoria. Ours is a very limited occurrence on a tree-fern trunk in company with Filmy-ferns and mosses, well up on the headwaters of Foster's Creek. Until I find those boundary pegs I cannot be quite sure that it is even within the park.

This particular stretch on the main creek supports the finest Tree-ferns in the whole area and the waters ripple through an arching tunnel of fern fronds. The scenery was further enhanced on the day of my visit by troops of a beautiful tall green toadstool, Cortinarius Austro-venetus.

And a later note: -

I was in some doubt about local records for the Oval Fork-fern, T. ovata, that I found in Foster's Gully. Mr. Norman Wakefield, in his 'Age' article on the fork-ferns intimated that there had been a collection in South Gippsland in 1939. I asked him to give details of this but he states, on checking Herbarium records, that this collection was of T. parva, the Small Fork-fern. Therefore the only other occurrence ever reported this side of Mt. Drummer was a single record for the Dandenong Ranges in 1853. It has not been found there since, evidently.

There are half a dozen tree-ferns supporting small patches of this rare little plant in the new Morwell National Park.

Ellen Lyndon.

Australian Plants listed for the Following Reserves:-

A.P.M. Reserve, (1); Traralgon South Reserve (2); Clark's Road Reserve (3); Tyers Plant Sanctuary (4); and Tyers Hill Plant Sanctuary (5).

		<u>1.</u>	<u>2.</u>	<u>3.</u>	<u>4.</u>	<u>5.</u>
Adiantum aethiopicum.	Maidenhair.					*
Acacia Brownii.	Brown's Wattle.		*	*		
" Juniperina.	Juniper Wattle.		*			
" melanoxylon.	Blackwood.	*	*	*	*	*
" mucronata.	Variable Sal-					*
	low Wattle.					
" mollissima.	Late Black		*	*		
	Wattle.					
" stricta.	Hop Wattle.				*	
" verniciflua.	Varnish Wattle.				*	*
Acianthus caudatus.	Mayfly Orchid.	*				
" exertus.	Mosquito Orchid.	*	*	*	*	
" reniformis.	Gnat Orchid.	*	*	*		
Acrotriche prostrata.	Trailing					
	Ground Berry.			*		?
" serrulata.	Honeypots.	*	*	*		
Amperca xiphioclada.	Brown Spurge.	*	*	*		
Anyena pendula.	Drooping Mitle-					
	toc.	*	*	*	*	*
Anguillaria dioica.	Early Nancy.			*	*	*
Banksia marginata.	Silver Banksia.	*	*	*		
Billardiera scandens.	Appleberry.		*	*	*	
Bossiaea cinerea.	Showy Bossiaea.	*	*			
" prostrata.	Creeping Bos-					
	siaea.		*	*	*	*
Brachycome angusti-						
folia. var						
heterophylla.	Daisy.	*	*	*	*	
Brachycome cardio-						
carpa.	Swamp Daisy.			*		
" decipiens.	Field Daisy.			*		
Bulbine bulbosa.	Bulbine Lily.			*		
Brunonia australis.	Blue Pincushion.	*		*		*
Burchardia umbellata.	Milkmaids.	*	*	*	*	*
Cassia parviflora.	Pale Grass-lily.		*	*	*	*
" vittata.	Blue Grass-lily.			*		
Caladenia alba.	White Caladenia.	*	*			
" angustata.	Musky "	*				
" carnea.	Pink Fingers.	*	*			
" dilatata.	Fringed Spider					
	Orchid.	*	*	*	*	*
Caleana major.	Large Duck Or-					
	chid.	*	*			

Plant Lists (Cont'd).

		<u>1.</u>	<u>2.</u>	<u>3.</u>	<u>4.</u>	<u>5.</u>
Calochilus Robertsonii.	Brown Beard.			*		
Cassinia aculeata.	Common Cassinia.					
	(Dogwood)		*	*	*	*
" longifolia.	Shiny Cassinia.		*	*	*	*
Cassytha glabella.	Tangled Dodder-					
	laurel.	*				*
" pubescens.	Downy Dodder-					
	laurel.	*	*			
Casuarina stricta.	Drooping Sheoke.		*	*		
" littoralis.	Black Sheoke.	*		*		
Centaureum pulchellum.	Austral Centaury	*	*	*	*	*
Chamaescilla corymbosa.	Blue Star.			*	*	*
Chiloglottis gunnii.	Common Bird Or-					
	chid.	*	*		*	*
" reflexa.	Autumn Bird Or-					
	chid.	*	*			
Clematis aristata.	Clematis.	*			*	
" glycinoides.	Forest Clematis.				*	
Comesperma ericina.	Pyramid Flower.		*			
" volubilis.	Love Creeper.	*		*		*
Coprosma quadrifida.	Prickly Cur-					
	rant Bush.				*	*
Correa reflexa.	Correa.	*	*			
Corybas diemenicus.	Purple Helmet					
	Orchid.	*	*	*	*	
" dilatatus.	Statelty Hol-					
	met Orchid.	*	*	*	*	
Craspedia uniflora.	Billy Buttons.	*		*		
Cymbonotus lawsonianus.	Bear's Ear.	*		*	*	*
Daviesia latifolia.	Hop Bitter-pea.		*	*		*
Dichopogon strictus.	Chocolate Lily.			*	*	*
Dianella revoluta.	Spreading Flax-					
	lily.	*	*	*	*	*
Dillwynia sericea.	Showy Parrot Pea	*	*	*		
" glaberrima.	Heathy " "	*	?	*		
" hispida.	Red " "			*		
" cinerascens.	Grey " "					*
Diuris longifolia.	Wallflower					
	Orchid.	*	*	*		*
" masculata.	Leopard Orchid.		*	*		
" sulphurea.	Tiger " "	*	*	*		
Dipodium punctatum.	Hyacinth " "	*	*	*		
Drosera auriculata.	Erriencellam Sun-					
	dew.	*		*	*	*
" peltata.	Sundew with basal					
	leaves.	*				
" Whittakeri.	Scented Sundew.			*		
Epacris impressa.	Common Heath.	*	*	*	*	*
Erechthites arguta.	Rough Fireweed.			*	*	*
" quadridentata.	Cotton Fireweed.			*		*
Eriochilus cucullatus.	Parson's Bands.	*		*		

(Cont'd)

Plant Lists (Cont'd).

		(10)				
		<u>1.</u>	<u>2.</u>	<u>3.</u>	<u>4.</u>	<u>5.</u>
Eucalyptus	bridgesiana.	Apple Gum.			*	*
"	obliqua.	Messmate.				*
"	polyanthemos.	Red Box.			*	*
"	radiata.	Narrow-leaved				
		Peppermint.			*	*
"	viminalis.	Manna Gum.			*	*
Exocarpus	grossiformis.	Cherry Ballart.	*	*	*	*
"	stricta.	Pale Ballart.	*			
Gahnia	psittacorum.	Brickmaker's				
		Sedge.	*			
"	radula.	Saw Sedge.			*	*
Glossodia	major.	Waxlip Orchid.	*	*		*
Glycine	clandestina.	Twining Glycine.	*		*	
Gnaphalium	involueratum.	Common Cudweed.		*		
"	luteo-album.	Jersey "		*		
Gompholobium	Huegelii.	Pale Wedge-pea.	*			
Goodenia	Ovata.	Hop Goodenia.	*		*	*
"	geniculata.	Bent Goodenia.				*
Gratiola	peruviana.	Austral Brooklime.	*	*		
Hakea	nodosa.	Yellow Hakea.	*			
Haloragis	tetragyna.	Raspwort.	*	*	*	*
Hardenbergia	violacea.	Purple Coral Pea	*	*	*	*
Helichrysum	dendroideum.	Tree Everlasting				*
"	scorpioides	Curling "	*	*		*
"	semipap-					
	posum.	Clustered "		*		
Hibbertia	acicularis.	Prickly Guinea-				
		Flower.	*			
"	linearis.	Showy Guinea-				
		Flower.				*
Hovea	heterophylla.	Common Hovea.	*			
Hymenanthera	dentata.	Shrubby Violet				
		Bush.			*	
Hypericum	gramineum.	Small St. John's				
		Wort.	*	*		*
Hypoxis	glabella.	Yellow Star.		*	*	*
"	hygrometrica.	Golden Weather-				
		glass.		*		*
"	pusilla.	Tiny Star.				*
Kennedya	prostrata.	Running Postman.	*	*		
Kunzea	peduncularis.	Burgan.		*	*	*
	(syn. Leptospermum					
	ericoides)					
Leptorrhynchus	tenui-					
	folius.	Wiry Buttons.		*		
Leptospermum	mrysinoides.	Silky Tea-tree.	*	*	*	
"	scoparium.	Manuka.	*	*		*
Leucopogon	virgatus.	Common Beard-				
		Heath.	*	*	*	

Plant-Lists (Cont'd).

		<u>1.</u>	<u>2.</u>	<u>3.</u>	<u>4.</u>	<u>5.</u>
Lomandra filiformis.	Wattle Matrush.	*	*	*	*	*
" longifolia.	Long "		*	*	*	*
Lomatia ilicifolia.	Holly Lomata.	*				
Lyperanthus nigricans.	Red Beak.	*				
Lythrum hrossopifolia.	Small Looses- trife.			*		
Melaleuca ericifolia.	Swamp Paper-bark.		*			
" squarrosa.	Scented " "		*			
Muellerina eucalyptoides.	Common Mistletoe.					*
Microseris scapigera.	Yam.			*		*
Microtis parviflora.	Slender Onion Or- chid.			*	*	*
" oblonga.	Scented Onion Or- chid.		*	*		
unifolia.	Common Onion Or- chid.			*		*
Pimelea glauca.	Smooth Riceflower.			*		
" humilis.	Dwarf " " *	*	*	*	*	*
" spathulata	Slender " " *	*	*			
Pomederris aspera.	Hazel Poma- derris.				*	
Pittosporum undulatum.	Sweet Pittosporum.				*	
Platylobium formosum.	Handsome Flat-pea. *					
Poranthera microphylla.	Small Poranthera. *	*	*	*	*	*
Pterostylis alpina.	Mountain Greenhood.			*		*
" curta.	Blunt " " *	*	*	*	*	
" falcata.	Sickle " "		*			
" fishii.	Winter " "			*		
" longifolia.	Tall " " *	*	*		*	
" nutans.	Nodding " " *	*	*	*	*	*
" parviflora	Tiny " " *	*	*			
" pedunculata.	Maroonhood			*	*	
" pusilla.	Ruddyhood.		*			
Pultenaea daphnoides.	Large-leaf Bush Pea.					*
" gunnii.	Golden Bush Pea. *	*	*	*		
" juniperina.	Prickly " " "				*	*
Ranunculus lappaceus.	Common Buttercup. *	*				*
" rivularis.	River " " "			*		
Ricinocarpus pinifolius.	Wedding Bush.		*		*	*
Rubus triphyllus.	Wild Raspberry.				*	*
Senecio lautus.	Variable Groundsel (Fireweed) *	*		*		*
" vagus.	Forest Fireweed.			*		
Spiculaca huntiana.	Elbow Orchid.		*			
Stackhousia monogyna.	Candles. *	*		*		*
Stellaria pungens.	Prickly Starwort. *	*	*			*
Stipa scabra.	Speargrass.				*	*
Stylidium graminifolium.	Grass Trigger- Plant. *	*	*	*		*
Stypandra caespitosa.	Tufted Lily.		*			

(Cont'd)

Plant Lists Cont'd.

		<u>1.</u>	<u>2.</u>	<u>3.</u>	<u>4.</u>	<u>5.</u>
Tetratheca pilosa.	Hairy Pinkeye.	*	*			
" "						
(White variety)					*	
Tetratheca ciliata.	Pink-Bells.				*	
Thelymitra carnea.	Pink Sun Orchid.	*				
" ixioides.	Spotted Sun Or-					
	chid.	*				
" media.	Tall Sun Orchid.	*		*		
" pauciflora.	Slender Sun Or-					
	chid.	*	*	*	*	*
Thysanotus patersonii.	Twining Fringe-					
	lily.	*		*	*	
" tuberosus.	Common Fringe-					
	lily.	*	*			*
Tricoryne elatior.	Yellow Autumn-					
	lily.		*	*	*	*
Veronica gracilis.	Slender Speedwell.			*		
Villarsia exaltata.	Yellow Marsh-Flow-					
	er.		*	*		
Viola hederacea.	Ivy-leaf Violet.	*	*	*	*	*
Wahlenbergia bicolor.	Bluebell.	*	*	*		*
" gracilentia.	"	*		*		
" quadrifida.	"			*	*	
Xanthorrhoea minor.	Small Grass-tree.		*	*		*

(All of the plants listed appear to be included in Miss Jean Galbraith's 'Wildflowers of Victoria' and members will appreciate the value of this work, particularly in relation to the five areas mentioned).

(Ed).

LATROBE VALLEY FIELD NATURALISTS

CLUB.

Yallourn,

VICTORIA.

Office-Bearers 1967 - 1968.

President: Mr. E. Homann, 84 Hennessey St., Moe.
Vice-Presidents: Messrs. J. Peterson, F.E. Jones and G.T. Scanlan.
Treasurer: Mr. E. McElroy, 35 Latrobe Street, Morwell.
Excursion Secretary: Miss N. Rossiter, Railway Avenue, Yallourn.
Publicity Officer: Mrs. Bon Thompson, Traralgon South.
Hon. Editor: Mr. G.T. Scanlan, L.V.C. Hospital, Yallourn.

Hon. Secretary: Mr. S. Belgraver, 179. Lloyd Street, Moe.

General Meetings.

Are held at the Yallourn State School on the 4th. Friday of each month, commencing at 7.30 p.m. A programme of proceedings may be obtained from the Secretary.

Excursions.

These are in the nature of field days under competent leaders and are held, usually, on the Saturday following the general meeting.
Visitors are welcome to both meetings and excursions.

Subscriptions.

Membership subscriptions become due in March of each year. The amount includes the cost of this publication, which is issued each month. Subscriptions are as follows:-

For adults:	\$1.00
For families:	1.50
Juniors:	.10

The 'Latrobe Valley Naturalist' is the official publication of the Club. It can be issued only to financial members of the Club with some few exceptions under postal Regulations.

The responsibility for matter printed in the 'Naturalist' is generally with the contributors. Every reasonable efforts are made to ensure the accuracy of the matter printed herein.

Contributions are invited from members, and others, on any aspect of Natural history which could be considered of interest to the members of the Club. They should be addressed to:

G.T. Scanlan,
c/o L.V.C. Hospital,
YALLOURN. VICT. 3838.



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Latrobe Valley Naturalist

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LATROBE VALLEY FIELD NATURALISTS CLUB.

Page 1.

YALLOURN.

VICTORIA.

Issue No. 45.

September 1967.

Dear Fellow Field Naturalists,

With this issue of 'The Latrobe Valley Naturalist' the monthly circulation is now about 120 copies, which includes 28 members of the Warragul Field Naturalists Club.

The decision of the Warragul Club to include its financial members as subscribers is most gratifying, and is an indication of the happy relations which exist between the two Clubs. This can result in a broadening of the interests and knowledge of us all as naturalists and increase the effectiveness of our efforts to conserve, in the face of development, the natural features, and the flora and fauna of Gippsland.

It is hoped that members of the Warragul Club, as well as members of the L.V.F.N.C. will send in contributions to the 'Naturalist'. Any matters of a natural history nature will be acceptable. Contributions may be long or short - it is preferred that the subject matter relates to the Australian scene - and simple drawings may sometimes help to illustrate an article. (Drawings need to be simple only because of the limitations of the Editor).

Facing the back page of this issue are the particulars of the Warragul Field Naturalists Club. Members of the L.V.F.N.C. will note that the meeting of the 15th. September will take the form of a talk on Birds by Mr. Roy Wheeler, the extremely knowledgeable and interesting Secretary of the Bird Observers' Club of Victoria. This will be at the Albert Street, Warragul State School, and will commence at 8 p.m. It is expected that some members from this Club will be attending Warragul.

May the two Clubs enjoy a long, happy and profitable period of co-operation !

General Meeting (L.V.F.N.C.) Friday September 22nd. The speaker at the September meeting is to be Mr. F.J.C. Rogers, President of the Victorian branch of the Society for Growing Australian Plants. His subject will be 'Acacias' - appropriate for this time of the year. Time of starting the meeting is 7.30 p.m., at the Yallourn State School.

Excursion on Saturday 23rd. September 1967: The object is to view the acacias along the Blackwarry Scenic Road and probably along the Grand Ridge Road, under the leadership of Mr. Rogers.

Members are asked to meet alongside the Traralgon High School at 9.30 a.m.. Any information regarding the excursion may be obtained from Mrs. L. Padfield at 42 Strzeleckie Road, Yallourn.

Keeping in touch on excursions: A request has been made to remind members of the need to keep in contact during excursions. It has been suggested that if each car keeps the following car in sight in the

rear-vision mirror there should be little possibility of losing touch and, where a member or member wishes to stop to view plants etc., a simple signal to the car ahead would enable this to be done. During a memorable excursion in the Boola Boola Forest area a few years ago some laggard members of the excursion were temporarily lost - to the extent that they never caught up with the main party.

Additional Excursion Sunday 15th. October: An excursion has been arranged on this day for the purpose of visiting the Wildflower Reserves and other areas at and beyond Labertouche, along the Gentle Annie Road. Place of meeting will be the Labertouche turnoff on the north side of the Prince's Highway at about seven miles west of Drouin.- 1.30p.m.

There is a botanical feast in store for those who are able to attend - boronias, grevilleas, grass-trees, ferns of many kinds - tall trees etc... It is not intended to travel a long way on this day, as there will be so much of interest to see in and about the reserves.

It is hoped that a member of the Warragul Club will be able to lead the excursion.

Executive Meeting Monday 4th. September: Few members of the Executive were available for this meeting - Miss Jean Galbraith and Miss Nancy Rossiter have been doing botanical field work in Queensland and the Warrambungles, and Mr. & Mrs. Peterson and family were to meet them at the latter area in N.S.W.; Mr. Frank Jones was not able to attend, and Mr. McElroy unfortunately waited elsewhere. However, the return of our nomadic President, Mr. Ern Homann, from warmer climes, enabled some of the more urgent matters to be dealt with. Some of these were:-

Classes in Natural History: It is understood that there were 28 replies from members indicating an interest in the proposed classes in natural history. However, as some would be able to attend only on specific nights not suitable to the tutors or some other of the members, it is thought necessary to invite non-members to take part. An advertisement is to be inserted in the 'Latrobe Valley Express' and, if there is a sufficient response within a reasonable time, arrangements can then be made for the classes to commence in 1968. It is now too late for these to commence during this year.

Programme for 1968: This was discussed during the Executive Meeting and the President, Mrs. Padfield and the Editor met again on the following Wednesday night for the purpose of finalizing a tentative programme. It is now necessary to contact prospective speakers for meetings and leaders of excursions, which is proceeding. It is hoped to publish the programme in November.

January 1968 Meeting: The January Meeting will be held on Friday 19th. January, earlier than the usual meeting night because the Club is to have a 'camp-out' during the week-end of 27th/28th/29th January at Wulgulmerang - on the property of Mr. Keith Rogers - and it is

expected that some members may wish to start on the way on the Friday. This is to be a member participation night (on the 19th. January) and will take the place of slides submitted by members, with a maximum of five and a brief description of the subject matter of the slide. They may be in black and white or colour. (It is known that some members have slides taken in black and white). The subject matter is required to be of some aspect of natural history and the various descriptions will be incorporated in a commentary which will be taped for convenience. The co-operation of members will be appreciated in this project.

Car Stickers: The season for travelling is approaching and it is suggested that members ensure that their vehicles - bicycles, cars etc. - carry the Field Naturalist Car Sticker. It is for the purpose of indentifying kindred souls, and the distribution has been over a surprising large area of Australia. The Secretary has supplies !

Next Meeting of the Executive Committee: This will be held at the home of Mr. Mrs. O. Thompson, Traralgon South, on the night of Monday 2nd. October, at 7.30.

GORMANDALE RESERVE: Note from Mrs. Bon Thompson.

Last year the Club had a Sunday excursion to the Gormandale area during October. There was a triangular piece of land, less than an acre in extent between three roads at about one mile north of Gormandale where grow the fan flower (*Scaevola ramosissima*), the wedge-pea (*Gompholobium latifolium*) and the golden Grevillea (*Grevillea chrysophaea*). Miss Jean Galbraith wrote to the Rosedale Shire Council requesting that the area be reserved, to which the Council agreed and said also that it would be fenced. A census of the plants in the area was asked for by the Council and a necessarily incomplete list was made in July and forwarded to the Council with a promise of a complete census to be taken in the Spring when possibly more plants will be added.

Mr. Peterson reports that the fence is already erected, and we must thank the Rosedale Shire Council for their very prompt action.

-B. Thompson-

The 'Yallourn, Victoria' at the head of Page 1 of this issue only indicates the place where the 'Naturalist' is prepared and where, for convenience, the Club at present holds its meetings. Members come from as far away as Leongatha to attend meetings and excursions, and the farthest away member is Mr. Keith Rogers of Wulgulmerang, grazier and naturalist who is known to many by his association with Mr. Norman Wakefield and for his 're-finding' of the Rock Wallaby, which it was thought then (1952 ?) was extinct.

NEW BOOKS: by the Editor.

'Naturalist's Diary' by Norman Wakefield. (Longman's)

This is a book for the naturalist's bookshelf, especially those of us who live in Gippsland, because it was at Orbost that Mr. Wakefield spent his boyhood, and in eastern Gippsland that he spent some years teaching, and of which he writes so much.

The book consists of modified articles which appeared in the Melbourne 'Age' under the heading of 'Naturalists Diary'. These articles still appear each Monday, and I know of several people who do not read the Age normally, but buy it each Monday merely to read this vastly interesting and informative column.

Mr. Norman Wakefield could probably be called a naturalist made in the mould of the late Crosbie Morriison - knowledgeable, understanding, dedicated, and able to encourage enthusiasm for nature in others. In the preface to 'Naturalist's Diary' he says: "... I trust that the book, and whatever successors there may be to it, will serve two important functions. The first should be to increase the readers' knowledge and understanding of the living world about him and thereby add to his pleasure in the natural environment. Secondly I should like to think that many will follow the trails that are described in these pages and thus have the opportunity to appreciate at first hand the fauna, flora and physical features of Australia's south-eastern corner, for, in attractiveness and interest, this region is second to no part of the continent".

'Geology of the Melbourne District, Victoria'. This is a publication, Bulletin No. 59, of the Victorian Geological Survey, of which Dr. D.E. Thomas D.Sc. is the present Director.

It is an account of the geology of the (greater) Melbourne area by various geologists of the Victorian Mines Department, one of whom is Dr. J.A. Talent who provided an article entitled 'Sedimentary Petrology and Palaeontology' (of the Melbourne area).

This is essentially for the geologist or interested student, although Dr. Thomas writes that several of the articles have been written "so as to be readily understood by the interested layman..."

A very well finished publication and cheap at \$2.50 plus 22c. postage. Perhaps to be borrowed from the local Public Library.

'Landform Studies from Australia and New Guinea' Edited by J.N. Jennings and J.A. Mabbutt. This new work on aspects of the geomorphology of Australia carries a foreword by Professor E.S. Hills, author, among other works of 'A Physiography of Victoria' and 'Structural Geology'. He writes "... We in Australia are still at the stage of recognizing the various elements of the landscape and describing them. We still lack sufficient precision in the cartographic representation of the land surface to add significantly to concepts of quantitative

geomorphology, but on the other hand we are contributing notably to the body of organised knowledge of elements of landscape and their origin".

'Landform Studies' consists of essays by 17 specialists in their fields, and provides hitherto unavailable information on the landscape of a number of regions throughout the continent and in New Guinea. It is, in fact, a fascinating story for the student.

There is a copy (when I have returned it) in the Yallourn Public Library.

--- G.T.S. ----

REPORT ON EXCURSION TO STONEY CREEK, COWARR, on 26/8/67.
by Miss Betty Kemp

A dull foggy morning began our excursion to Stoney Creek, Cowarr, but by the time we had forgathered at Toongabbie, the sun was tempering the cool breeze. It played hide and seek with us throughout the day, and finally gave up the ghost as we left for home.

This was to be a 'bird-watching' excursion, under the leadership of Mr. Frank Jones and, as we wended our way via the 'back' way (the Cowarr Weir crossing being closed to traffic), our first interesting glimpse of bird life was a flock of Straw-necked Ibis feeding in a green paddock close to the road. Disturbed by our convoy, they rose as one in an exploding black and white pattern.

Further on, we passed a beautiful specimen of Early Black Wattle (*Acacia decurrens*) from N.S.W., its magnificent golden blossoms standing out against the dull foliage of the surrounding trees. There was no time to stop to capture its glory on films, and failing light prevented this on the homeward trip.

Arrived at Stoney Creek where our leader had his camp by the bridge, we had a quick 'cuppa', watching the many tiny Blue Wrens, male and female, raiding the broken up termites' nest which Mr. Jones had produced for their (and our) benefit. High overhead, a Yellow-winged Honeyeater sped from branch to branch of a tall dead tree, presumably not in search of honey. Here we also spied a Brown Thornbill and Eastern Shrike Tit.

Crossing the bridge, we followed a path up the hill through bushes of budding Hop Wattle (*A. stricta*), and under a canopy of Red Box (*E. polyanthemos*), Red Ironbark (*E. sideroxylon*) and Yellow Stringybark (*E. muelleriana*), eyes strained for a sight of our feathered friends, and ears pricked for their calls. There was the musical chatter of a Flame Robin, the lovely call of the Australian Thrush and the full-throated voice of the Pied Currawong. From the gully came the crack of a Whip-

bird, while black Crows added a harsh sour note across the creek. Also seen were the Spotted Pardalote (Spotted Diamond Bird), the Striated Pardalote, Eastern Spinbill and a female Golden Whistler. Here an observer gleefully reported a tree-top battle between two male Golden Whistlers with feathers flying. Was this territorial or domestic trouble?

At the top of the hill we came across two Imperial White Butterfly chrysalises hung in a fine misty net between leaf stems - shiny black with spiny backs and a horn in front - frightening creatures that obviously required no more protection than their appearance.

Through the bush and down the roadway above the creek leading back to the bridge, we spied many little bushes of yellow daisies with bright green cosmos-like foliage (Senecio?), and tall-stemmed Nodding Blue Lily (Stypantra glauca) with its pretty blue six-petalled yellow-stamened flowers. There must be something of the Bower Bird about us, the way that blue attracts us in the bush - the blue-green of the young Blue-Gums, the brilliant purple flowers of the Hardenbergia trailing amongst the green bushes, and the lovely glimpse of blue sky looking up through dark green foliage or golden wattle, or reflected in still, clear water.

Back to our camping ground for lunch under a Blackwood, noting nearby dried specimens of the Thorn Apple (*Datura stromonia*), naturalised in Victoria since the 1880's, and the fluffy green 'carrot top' foliage of the Hemlock (*Conium maculata*), sometimes called Carrot Fern.

Refreshed, then followed a rugged hike up the creek bed where it enters the hills and runs between steep banks. At times the water ran fast between great boulders, or spread out in a shallow shimmering sheet over stretches of smooth colourful pebbles. Here was a delight of flora, some in flower, some in bud, and others yet to blossom. Green mosses on the rocks, and on the banks with pink-belled Heath growing from them, Maiden Hair everywhere, and Rock Fern (*Cheilanthes tenuifolia*), and the Wild Violet (*Viola hederacea*). Here and there the golden catkins of the bushy Sallow Wattle (*A. mucronata*) filled the dry reaches of the creek bed with colour.

As we scrambled over rocks and along the steep banks, we had little opportunity to watch for birds (if any had dared to remain), but we did sight the small grassy nest of a Red-browed Finch and made the great discovery of a Lyrebird's nest high up in a bank overhang. It appeared to be an old one but turned out to be occupied. Unfortunately the hen bird was disturbed and fled the nest with a loud protest. It is hoped that she later returned to protect her egg.

Our preoccupation with finding foot and hand hold brought us into close contact with many varieties of plants, one of the most rewarding to the writer being the large (8 feet) and small bushes of the lovely longleaf Wax Flower (*Eriostemonmyoporoides*) with its five white to pink petals, orange stamens and dark green aromatic leaves. Other

strongly aromatic-leaved shrubs were the Mint Bushes - Balm (*Prostanthera mellissifolia*) and Rough (*P. denticulata*) not yet in flower. In this area also were Turnip "ood (*Rapanea howittiana*), the Tree Violet (*Hymenanthera dentata*) in flower, and Hazel Pomaderris (*P. aspera*) with its wrinkled felt-like leaves. The graceful Bootlace Bush (*Pimelca axiflora*), already in bud, caught at our feet as we struggled on. Finally, reaching our turning back point - a deep pool with large rocks - the survivors were delighted to discover Orchids - the Nodding Greenhood (*P. nutans*) and the Maroon-hood (*Pterostylis pedunculata*). Wearily we wended our way back, with many wet feet and at least one wet tail.

Although winter was not officially over, the bush was colourful with blossoms of the Hop and Sallow Wattles already mentioned, the Golden Wattle (*A. pycnantha*), White Correa (*C. reflexa*), the bright yellow Showy Guinea Flower (*Hibbertia linearis*) and the Common Appleberry (*Billardiera scandens*). Already in bud were the Sweet Bursaria or Kurwan (*B. spinosa*), a Tea-tree with small indented leaves (*Leptospermum obovatum* ?), and the low growing White Marianth (*Marianthus procumbens*), the Dwarf Riceflower (*Pimelca humilis*), and Peach Heath (*Lissanthe strigosa*). *Hakea dactyloides*, also in bud, carried many large grey-brown seed cases shaped like stomachs !

Other plants identified but not in flower were the Large-leaf Bush Pea (*Pultenea daphnoides*), Snow Daisy Bush (*Olearia lirata*), Golden Tip (*Goodia latifolia*), Narrow-leaf Bitter Pea, Wattle Mat-rush (*Lomandra filiformis*), Lomatia (*L. longifolia*), Grey Everlasting (*Helichrysum obcordatum*), Nodding Saltbush (*Rhagodia nutans*), Austral Mulberry or Orangewood (*Hedycarya augustifolia*), the Kangaroo Apple (*Solanum aviculare*) and the Prickly Starwort (*Stellaria pungens*).

It had not been a very good 'bird' day, due partly to the numbers (30), and partly to a gap in the flowering of the eucalypts which would have attracted more birds, but we were very pleased with our discoveries and felt that the area had provided a variety of interests for all. Mr. Jones himself had identified 74 varieties of birds in the locality, but then he has a way with them. After thanking him for a happy day, we moved off smartly homeward into the threatening rain.

----- B. Kemp -----

Australian Conservation Foundation: The Australian Conservation Foundation of which the L.V.F.N.C. is a member body has issued its Annual Report for 1966/1967. The report refers to the appointment of Dr. D.F. McMichael, at present Deputy-Director of the Australian Museum in Sydney, who will take up his duties in October as full-time Director of the Foundation. His work as Director should give impetus to the activities of the Foundation, which has already achieved a great deal in the matter of organisation in all of the Australian States. It has published its first Newsletter and Viewpoint Series No. 1., on the conservation of Kangaroos is the first of a practical series on conservation.

Among projects already assisted by the A.C.F. are grants towards the preparation of pocket guides to identification of Australian birds in the field by two teams of workers, Graham Pizzey and Robin Hill, and Eric Lindgren and Peter Slater.

A grant has also been made towards the cost of a Nature Conservation ^{survey} of Victoria being undertaken by Mrs. Judy Frankenberg, M.Sc., a former post-graduate student in ecology in the Melbourne University Botany School under the supervision of Professor J.S. Turner.

The Council of the Foundation is also interested in the problem of conservation of Cape Barron Geese in Bass Strait; the creation of a Macropod (the Kangaroo-Wallaby family) Reserve in New South Wales; the preservation of the remnant of the natural forest on Norfolk Island and the conservation of the lowland tropics of Queensland.

----- Ed -----

"TOO LITTLE OF EVRYTHING EXCEPT PEOPLE". From 'Wildlife Service' March-June Issue (1967). Published by The Fauna Panel of N.S.W. The Lands Department of N.S.W.

"The quality of human civilization depends upon the availability of resources for physical, mental and aesthetic wellbeing. The problem of conservation is to ensure a continuance of the supply. This obviously becomes a matter of equating population with resource supply. Part of the problem is to study the more efficient utilization of resources, many of which are of finite quantity.

Good sense dictates that conservationist thinking should also actively engage the population side of the problem."

AND: " Man's habitat is finite, and cannot support infinite numbers any more than a marsh can support infinite numbers of wildfowl or a range can support infinite numbers of deer.

Population control would not ensure attainment of conservation objectives, but it would make them attainable. There would be no hope of attaining our goals in a world with too little of everything except people."

The main theme of the above issue of 'Wildlife Service' is the contribution of National Parks to conservation, and extensive references are made to the Warrumbungle National Park, in the Warrumbungle Range in New South Wales.

----- Ed -----

THE CROW: (Or is it a Raven ?) From 'Wildlife
Service' Vol. 3 No. 5. Fauna Protection Panel, N.S.W.

TIPS

Studies on the ecology of the Crow or Raven (*Corvus coronoides*) continued at three very different locations, all in New South Wales:- Lake George, Hay, and the Kosciusko State Park. Over 400 nests were found and followed through each year; productivity varied from year to year depending on the season, and from 1.5 to 2.0 young fledged per pair.

Ravens have been trapped and banded at each of these places and at several others, where members of the Australian Bird-banding Scheme have co-operated most helpfully. More than 6,600 ravens have now been banded and the past year produced two band returns from distances twice as great as any recorded previously - 320 and 260 miles. These records illustrate the raven's capacity as a traveller, especially since the second distance was covered by a bird only four months out of the nest. In general the movements of ravens tend to be random in direction; however recent returns of bands suggest there may be a regular seasonal movement (summer) from the dry, hot, inland plain to the better-watered areas near the coast.

Regular observations continue on the interaction of ravens and lambing flocks, both on the Southern Tablelands and the inland plain of N.S.W.. Neither these observations, nor special visits to situations where ravens have been blamed for high lamb mortality, have shown the raven to be a significant predator of healthy lambs.

The examination of the contents of the stomachs of 500 ravens has indicated that the diet covers a wide range but consists predominantly of insects.

Transect counts made at regular intervals through two main study areas show large fluctuations in the numbers of ravens present at different seasons of the year and emphasise the nomadic nature of the species.

So, don't shoot that Raven (Or Crow) (Ed).

(Filched from the September 'Clubman')

As Editor I always try to be patient with any member who disagrees with me. After all, he is entitled to his own ridiculous opinion !

G.T. Scanlan,

HON. EDITOR.

WARRAGUL FIELD NATURALISTS CLUB.

Office-Bearers 1967 - 1968.

President: Mr. Jack Brooks, Box 120, WARRAGUL.

Vice-Presidents: Mr. Clive Fisher, Old Bona Vista Road, WARRAGUL.
Mr. Geoff. Foster, 31 Edinburgh Street, WARRAGUL.

Secretary: Mr. Don Steele, Edinburgh Street, WARRAGUL.

Treasurer: Mrs. Betty Steele, Edinburgh Street, WARRAGUL.

Committee: All above.
Mr. Dick Briggs, 59 Brandy Creek Road, WARRAGUL.
Mr. Les Anderson, King Street, WARRAGUL.

MEETINGS: General Meetings of Members are held on the third (3rd) Friday of each month in the Warragul State School (Albert Street).
Meetings commence at 8 p.m. and members are invited to bring items of interest to share with those present. Friends and visitors are assured of a warm welcome.

EXCURSIONS: Excursions are arranged whenever possible and, as a general rule are two weeks after the General Meeting. As will be read elsewhere Members and Visitors are invited to join the excursions of the other Clubs in the area.

SUBSCRIPTIONS: The Annual subscriptions, which become due at the end of February in each year are as follows;

Family.	£1.50	
Single.	£1.00	
Junior.	50c	(attending school)

The 'Latrobe Valley Naturalist'.

Financial Members of the Club will receive a copy of this periodical.

It would be appreciated if members of the Warragul Club would support our sister Club by forwarding contributions whenever possible.

We acknowledge the generosity of the Latrobe Valley Field Naturalists Club in granting us the privilege of receiving copies of their excellent publication.

Don. Steele.

SECRETARY.

FUTURE MEETINGS:

September 15th.	Mr. Roy Wheeler.	Birds.
October 20th.	Mr. Rod Jackson.	Grevilleas.

LATROBE VALLEY FIELD NATURALISTS

CLUB.

Yallourn,
Gippsland,
VICTORIA.

Office-Bearers 1967/1968.

President: Mr. E. Homann, 84 Hennessey St., Moe.
Vice-Presidents: Messrs. J. Peterson, F.E. Jones and G.T. Scanlan.
Treasurer: Mr. E. McElroy, 35 Latrobe Street, Morwell.
Excursion Sec'ty: Miss N. Rossiet, Railway Avenue, Yallourn.
Publicity Officer: Mrs. Bon Thompson, Traralgon South.
Hon. Editor: c/o Latrobe Valley Co. Hospital, Yallourn.

Hon. Secretary: Mr. S. Belgraver, 179 Lloyd Street, Moe.

General Meetings:

Are held at the Yallourn State School on the 4th. Friday of each month, commencing at 7.30 p.m.. A programme of proceedings may be obtained from the Secretary.

Excursions:

These are in the nature of field days under competent leaders and are held, usually, on the Saturday following the general meeting. At least two 'camp-outs' are arranged each year.

Visitors:

Are always welcome to attend meetings and excursions.

Subscriptions:

Annual subscriptions are due after the end of February in each year.

Rates are: -

For Adults (singles).	\$1.50
For Families. (Human)	\$1.50
For Juniors.	.10c.

The 'Latrobe Valley Naturalist' is the official publication of the Club and can be posted only to financial members of the Club. This is necessary under Commonwealth Postal Regulations for registration purposes.

Contributions are invited from members and others genuinely interested in the natural features, and the flora and fauna of the world in which we live. These may be sent to the Hon. Editor.

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protect and enjoy

LATROBE VALLEY NATURALIST

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LATROBE VALLEY FIELD NATURALISTS CLUB.YALLOURN. VICTORIA.

Dear Fellow Field Naturalists,

General Meeting (L.V.F.N.C.) Friday 27th. October: The inclusion of the letters L.V.F.N.C. in brackets is to avoid confusion in the minds of our Warragul F.F.N.C. associates.

The speaker at the Yallourn meeting will be Dr. L.H. Smith, Director of the National Parks Authority of Victoria, and his subject will be, appropriately: 'Some aspects of National Parks'. Dr. Smith is a most interesting speaker, and has travelled widely in the interests of the work of his Authority. We continue to wonder at the generosity of experts like him who, despite many calls upon his time, and their time, willingly agree to travel to Yallourn for the purpose of spreading the 'message'.

Excursion Saturday 28th. October: This is to follow the talk by Dr. Smith on National Parks. Members are asked to meet at Parker's Corner by 10 a.m., when the party will move off along the Thomson Valley Road north to the point of crossing the road by South Cascade Creek. There should be much of botanical interest, with the sound and sight of birds, and perhaps some of the party might be able to envisage the area as part of a future National Park. It has tremendous possibilities in this direction.

South Cascade Creek, as members will know, is a tributary of the Thomson River, flowing into the river at a point about 11 'crow' miles north of the junction of the Thomson and Aberfeldy Rivers.

Camp-out at Wilson's Promontory - week end Saturday and Sunday 4th. and 5th. respectively of November. It is regretted that it has not been possible for the excursion Secretary to arrange for the cabin accommodation which it was hoped would be available, principally because of the increasing demand for longer periods than a week end. However, members with camping facilities are invited to still make the journey, and enjoy the Promontory - its flora and fauna and the magnificent natural features of land and sea. Many members have already indicated their intention to be there.

Tree planting and the Hazelwood Arboretum: A comparatively few members attended at the Arboretum on Saturday the 30th. September for a tree planting which was quite successful. This was undoubtedly due to the enthusiasm of the members present, the leadership of Mr. Bob Auchterlonie, and the excellent weather. There were many blooms to be seen on earlier plantings, and visitors will still see much that is worth the looking. To add to the pleasure of the day were the Larks, rising

(Cont'd over ...)

Editorial. (Cont'd)

from the ground to the sky above the Arboretum and giving forth, in the words of Leach "... a flood of melody."

--- G.T. Scanlan ---
Hon. Editor.

A FIELD DAY IN JULY: by Jack & Nancy Brooks, of Warragul.

On July 2nd. the Warragul Field Naturalists Club members met at Crossover for an excursion led by Dick Briggs to the dismantled railway line between Crossover (once famous for its gold rush), and Rokeby on the main line between Warragul and Noojee - in fact it runs through an isolated area of Reserved Forest approximately 2 miles long and from a quarter to one mile wide.

Without going off the well paved track, several varieties of acacias, eucalypts and tea-tree were noted as well as some hill banksia, silky hakea, sedges and dodder, to mention only a few. We were interested to find bushes of Prickly Geebung (*Persoonia juniperina*) as we are not very familiar with it in the Warragul area. At the other end of the scale we found numerous mosses, lichens and fungi. The scrambling coral fern is growing in profusion down the steep slopes of the cutting at the Crossover bridge and patches of pouched coral fern are growing nearby.

Mrs. Algie identified especially the grey fantail, white-throated tree creeper, yellow robin, and the brown thornbill, as well as the lyrebird, teasing us with its perfect mimicry of other bush birds.

Amongst the twelve species of ferns noted was one similar to the necklace fern, growing along the bank. It aroused our curiosity, but we could not find the tail which is peculiar to the necklace fern, and it grew in a neat bunch, not straggling. When we consulted 'Victorian Ferns' (N.A. Wakefield) it appeared that it must be the common spleenwort (*Asplenium trichomanes*) which is seldom seen in Australia, but later examination showed it to be Screw Fern (*Lindsaya linearis*), which has barren fronds much broader than the fertile frond shown in the Fern book. The fronds of Screw Fern are fan-shaped with veins spreading from the base; those of the Spleenwort are more oval, with pinnate veins. This may help other naturalists, particularly if they are puzzled as we were.

Our sympathetic Forestry Officer assures us that every care will be taken to preserve the precious plant in the fascinating nature trail.

--- Jack and Nancy Brooks ---

PREVIEW OF THE PROMONTORY: by Mrs. E. Lyndon.

September has not been a very pleasant month for campers in Gippsland this year, but in the third week we decided to risk the weather and spend a few days at Tidal River. It is a sheltered spot and we enjoyed it.

The heathlands, especially where the slasher has removed the coarser upper cover, are brightening with patches of color. Golden Guineas, *Tetralochea* or Pinkeye, *Correa*, Heath and Beard-heath and the dainty little Love Creeper are making small splashes of blue and gold and magenta. On the big dune that runs through the camping area there are drifts of *Claadonia*s - Pink Fairies and Blue ones. The Harlequin Orchid and Waxlips and the leaves of many more to come. *Lyperanthus* leaves are often observed in colonies but seldom in flower. This year we found several stems of the lovely Redbeaks blooming on the dunes that encircle the tip. In the same area, rising above the rest, were two great spikes of a Leek Orchid close packed with perfect little blooms, each with frilled tongue and united upper sepals. Some serious consultation with my several authorities leads me to believe that these were the Tall Leek Orchid, *Prasophyllum elatum*. In wet mossy places among rocks were a couple of the smaller Greenhood species, dwarf *Pterostylis nana* and the Ruddy Hood, *P. pusilla*. The cheerful Wallflower *Diuris*, *D. longifolia* was not uncommon.

The Wallabies were there, very self-possessed folk, quite used to humans invading their privacy. Many of the does carried full pouches from which an extra tail or some other portion of a joey's anatomy dangled carelessly. Up on the track to Tidal Outlook we met with a solvery-grey Wallaby quite different in coloration to the dark brown ones about the camp. It was on this track (it is one of the most rewarding walks but don't be tempted to do the round trip and come home by the hard hard road as we did, it's not worth it!) that we saw a Wombat feeding in the evening light. Being downwind of it in a stiff breeze we were able to work up quite close before a cracking stick betrayed us and sent *Vombatus* plunging away into the cover of the gully. It never even looked round to see who or what was sneaking up.

I had an experience with another one while my husband was back in camp watching the birds. I was having trouble with dense banksia and sheoak thickets and was forced to crawl along a game trail. There was a whitish patch kept bobbing along in front of me and when I emerged into the light I saw it was the well-worn rear end of a Wombat that climbed steadily up through the rocks ahead. Every movement of the animal registered disgust. I could imagine him thinking: "a fellow can't lie down for a snooze these days without some tourist creeping up on him!"

(Cont'd over...

Preview of the Prom'. (Cont'd)

The birds of Tidal River are always a delight and as soon as camp is set up all sorts of enquiring visitors arrive. Our poultry yard boasted a flock of Silvereyes, another of Red-browed Finches, a covey of Scrub-wrens not averse to hopping inside under the table; Blue Wrens, Yellow Robin, an Olive Whistler, several Yellow-faced Honeyeaters, a Kookaburra and a Thrush. The teatree was full of noisy Yellow-winged Honeyeaters busy about their own affairs. All of the others mentioned vied with each other for crumbs or waited their turn at the syrup jars. Crimson Rosellas were there in force. I counted thirty six at one time, brilliant in varying degrees of plumage, grazing on the village green in company with a horde of Silver Gulls. One is apt to forget just what a handsome bird is the Common Gull in its snowy feathers suffused with soft grey on the upper parts, that contrast so well with scarlet bill and legs and eye ring. The two species feeding in company are a splendid sight. But woe betide any hapless human that crosses the green eating an icecream or carrying other eatables. He is set upon at once by the parrot pirates and his person soon covered with clinging birds fighting for a foothold.

My husband now takes up the story of the birds: "I found it of great interest to compare the behaviour of the various flocks that we saw. The Gulls would stand alert, wary and watchful, ready to dart in and snatch any crumb that fell outside what they considered a safe distance. All the Gulls in the area arrived immediately there was any tucker going.

The Parrots are extremely confident and will walk all over their host to get at the food. They have a definite peck order, one bird after another being bullied out of the way until the chief bully is left in possession, making aggressive little runs at any bird attempting to share with him. The smaller birds stand aside. The Parrots did yield to the Jackass although they stood in no great fear of him. There were occasions when a piqued Parrot pecked Jack on the back of the head or snatched a morsel from his beak.

Individual Parrots vary greatly in their respect for human dignity. Some exhibit great gentleness with their host's person while others may roughly pull aside his fingers to get at the biscuit, at times giving quite a sharp nip in the process.

The Silvereyes would arrive in a cloud and any finds they made were community property. They are an amiable mob, gently twittering all the time and there always seems to be room for one more at their table. They go as quickly as they come. The Scrub-wrens were always scurrying around ready to feed at your feet if necessary. Any crumb

(Cont'd over ...)

Preview of the 'Prom. (Cont'd).

bonanza was worked over until it was finished. Blue Wrens, on the other hand, work rapidly around a much greater area, and even if they come on a patch of crumbs sufficient to last the day they soon move on. Neither they or the 'Scrubbies' seem particularly interested in their neighbours' finds, each one concentrating on his own foraging. The Yellow-faced Honeyeaters' greed for sweets so overcame his natural caution that he would flutter in your face and couldssometimes be touched.

The 'loners' were the Thrush, the Olive Whistler and the Yellow Robin. The Thrush would flit round the outskirts of our camp and make a thorough reconnaissance before the brief visit to snatch a titbit and away. The Whistler would come along with a flurry of wings and greedily gobble anything on the ground and then be off. The Robin would arrive and perch on a twig, have a long look around, then fly to the chosen morsel, consider it, take it and then depart."

-- E. & D.W. Lyndon.--

MORE OF STONY CREEK, COWARR: by Miss B. Kemp.

Our recent excursion to Stony Creek, Cowarr, brought back memories of a pleasant Sunday spent in the area early this year. We had gone in over the Cowarr Weir, crossed the Stony Creek Bridge and turned left through the bush, bumping down onto the dry creek bed about a quarter of a mile from the bridge. Mr. Frank Jones was camped here for a weekend bird-banding and had mist nets on the banks above a water hole frequented by quite a number of birds and 'water dragons'. It was my first experience of mist netting and I was amazed how deft and gentle he was in handling the tiny birds.

The creek was quite dry in spots, the water disappearing into the sands, emerging to form water holes or to run over stony reaches and through vegetation. What fascinated me was the variety of rock - stones and their colours in the creek bed. Presumably, many were washed down from higher up the stream to account for this diffusion.

At this point also, a tributary joins the creek, narrower and more rugged in its rock-filled bed which had a noticeable slope toward the main stream. It was quite dry and had less rounded, smooth and water-worn pebbles, but the colours seemed stronger in the basic rocks. The slate appeared bluer, possibly because there was more yel-

(Cont'd over ...

More of Stony Creek. (Cont'd)

low and red about as well. As the junction of the two streams occurs through a hill (not between them) one assumes the land arose at a later stage.

While we were there a number of people came in cars to collect stones for their gardens etc.. Anyone with skill and patience could create most artistic effects in stonework in their homes, inside and out. Not that I recommend the denudation of a creek bed for the purpose.

Here the creek is entering hills again, so its banks are fairly high. I don't think of it as a creek at all - to me it has more the maturity of a river with a number of its rugged features such as high cliffs, giant boulders and trees growing in its bed. Obviously a great deal of water does not come down it now, so possibly the many stones and worn pebbles are the accumulation of a long period as the stream wore its way down through the different strata of rock.

Someone better versed in natural history no doubt would have an interesting tale to tell of the life of this stream, of the phases it went through in its development, its ecology, the types of rock it traversed as it deepened its course to produce the wealth of colour and shape that now litters its bed at this spot.

--- Betty Kemp ---

New Books Read and Recommended: by the Editor.

'Australian Wildflower Magic' by Nuri Mass (Bridge Printery). Published June 1967, and which is: "Dedicated also to Australia's wildflowers, which so richly deserve our protection - and our love."

Intended primarily for young people, it is a valuable work for all of us who wish to learn more of our native plants. It is a very well produced book, the drawings are excellent, and the text entertaining as well as informative.

'Nature Walkabout' by Vincent ^{Serventy} (Reed) Published 1967.

Yet another by this prolific author of the things of nature. The 'walkabout' took place when Dr. Serventy transferred from Perth, W.A. to Sydney - a journey which stretched into 15,000 miles and took six months. There are 105 magnificent illustrations in colour and much authoritative valuable and interesting information.

Both of these books should be in your Public Library, but not permitted to rest long on their shelves !

MORWELL NATIONAL PARK: by Mrs. Bon Thompson.

In company with Mr. & Mrs. Lyndon we visited the Morwell National Park to photograph the Oval Fork Fern. It was a most instructive and enjoyable day. As well as the ferns we have seen on Club excursions to the area we came to know the Shiny Shield Fern (*Ctenitis shepherdii*), Leathery Shield Fern (*Rumohra adiantiformis*), Veined Bristle Fern (*Polyphlebium venosum*), Austral Filmy Fern (*Mecodium australe*) with fruiting bodies, Sickie Fern (*Pellaea falcata*), Mother Spleenwort (*Asplenium bulbiferum*) with the new ferns at the tips; Gristle Fern (*Blechnum cartilagineum*), the Finger Fern (*Grammitis billardieri*) with its long sori; the Oval Fork Fern (of course) (*Tmesipteris ovata*), and our fern find for the day the Long Fork Fern (*Tmesipteris billardieri*), not rare like the Oval Fork Fern but still uncommon.

The vines of the Twining Silkpod (*Lyonsia straminea*) were everywhere and we saw the plants of *Fieldia australis* - Bells on Treeferns - although we could not find any bells. The day was not without its orchids, although none were flowering. There were Helmetts (*Corybas*) leaves, one colony growing in moss in a hollow in a horizontal branch, greenhoods in bud but not big enough for identification and, of course, the Tree Orchid (*Sarcochilus australis*). We found this orchid growing on five different types of trees - the Prickly Coprosma (*Coprosma quadrifida*), the Musk Daisy Bush (*Olearia argophylla*), the Dogwood (*Cassinia aculeata*), the Turnipwood (*Rapanea howittiana*), and the Sweet Pittosporum (*P. undulatum*). Mosses abounded in plenty varying from the giant form of pine moss, the lacy mosses, the usual low moss, to a delightful moss that looked as if it was made of pale green velvet. Many of them had fruiting bodies standing above the moss.

I must also tell you of the fungi! They were of every color and size. The brown cup type, little brown parasols, tiny white parasols, little hard black clubs about half an inch high, bottle green fungi white underneath but with green stems, horse shoe fungi (tough bracket type), grey and white bracket fungi, and delightful orange bracket fungi. There was an apricot shade bracket fungi, very fluted, papery thin and crisp. The lovely red parasol (*Hygrophorus miniatus*) and, keeping the best to the last, a rather poor specimen but definitely identified by Mrs. Lyndon as the rare mauve fungi (*Hygrophorus lewellinii*) which is usually found on sandy coastal plains. This was the first record east of our coastal ranges and, apart from specimens in the Otways, the only other record so far inland.

There are some magnificent old trees in the area. Nearby was a lyre bird's mound. Birds were plentiful - a scrub wren

Morwell National Park. (Cont'd).

announcing that we were trespassing, a friendly robin (yellow) keeping us in sight for quite a long time, a noisy cuckoo creating a disturbance, a whipbird, and many others; but one cannot look up and down at the same time... There was much evidence of animal life, particularly on the bark of the trees, many animal tracks, and a large wombat burrow.

As usual we ran out of time, but carried home with us many delightful memories of a very happy day.

-- Bon Thompson --

EUCALYPTUS NOTES: by Mr. Bob Auchterlonie.

In my contribution on Latrobe Valley Eucalypts in the issues of October, November and December 1966, the dimensions of the subject and the knowledge of my own limitations in dealing with it, prompted me to add the qualifying letters 'E. & O.E.' (Errors and omissions excepted). I now wish to point out one error, and several omissions.

The error cropped up in discussing the two Red Gums, when it was inferred that all those in the Latrobe Valley were Forest Red Gums (*E. tereticornis*), and that the nearest River Red Gums (*E. camaldulensis*) occurred in the Dandenong - Hallam area. This is quite incorrect, as both species do in fact occur in the Latrobe Valley. Although Forest Red Gum predominates, River Red Gum may also be found along the Prince's Highway between Traralgon and Rosedale, as well as further east on the banks of the Macalister River. Chief distinction between the two is in the operculum (cap) which in camaldulensis is the same length as the capsule - pinched - so that it terminates in a sharp point or 'beak'; whilst in tereticornis it is twice as long as the capsule, and evenly tapering to a blunt point. There is also a fairly distinct difference in the habit of growth of the trees, tereticornis being usually the more upright grower, while camaldulensis is more drooping, which makes my previous error and lack of observation all the more inexcusable.

I am indebted to Miss J. Galbraith for drawing my attention to the above error, and also for the information that there is a local occurrence between Erica and Cowarr of Mealy Stringybark (*E. cinerea*). This species is closely related to Silver-leaf Stringybark (*E. cephalocarpa*), resembling it in all features except the inflorescence, which has only three flowers per umbel instead of seven. It is more plentiful in North-east Victoria, whilst the seven-flowered form predominates in Gippsland.

(Cont'd over ..

Eucalyptus Notes. (Cont'd).

Two more species omitted from my previous list were observed during the Club's recent outing to the Stoney Creek area, Cowarr. The first of these is St. John's Gum (*E. st. johnii*), a member of the Blue Gum group, characterised by its comparatively small, and quite smooth fruits. In all other respects, it resembles the commoner Blue Gums.

I could get only fragmentary specimens of the other one, but it appears to be the River Peppermint, or River White Gum, (*E. lindleyana*, syn. *numerosa*). Growing along the banks of the stream, this a slender, medium-height tree, with rough peppermint bark on the upper trunk and branches, and about twenty small fruits per umbel on the specimens seen.

Perhaps I may add that *E. yarraensis* was intentionally omitted from my previous list, because I know of only one very small occurrence of it, on the railway enclosure between Morwell and Hazelwood. It is a medium-size tree, with rough bark, and an inflorescence somewhat resembling Swamp Gum.

Finally, on the Club's last excursion, a complete stranger was found beside the Grand Ridge Road west of Balook. This tree resembled Mountain Grey Gum, (*E. cypellocarpa*) in all respects except the inflorescence, which comprised a three-fruited umbel, on a long, flat peduncle. Buds were rough, and fruits quite large and bell-shaped, with valves slightly sunk. As this does not tally with any recorded species, a specimen was sent to the National Herbarium, Melbourne, for determination. Their reply was: "Affinities with *E. cypellocarpa*, and perhaps a hybrid involving that species. We do not have any comparable specimen in the Herbarium, and have kept your specimen for reference purposes. It is certainly an interesting tree."

Determination of whether or not any eucalypt is a hybrid, would be a lengthy process, involving self-fertilisation and growing on trees for several generations in order to observe whether characters follow the Mendelian pattern, a job which could well extend beyond the life-time of one person.

-- Bob Auchterlonie --

Highlights of a Trip North. (Cont'd)

Proceeding north of Brisbane, the dominating feature of the landscape was the Glasshouse Mountains, so named by Captain Cook. These thrust upwards as giant fingers of rock and may be seen from many miles away. Geologists, I believe, call them residual volcanic plugs. They are composed of the rock trachyte which, being very hard, was left as the surrounding softer rocks were worn away. Beside the road were many large bushes of a species of Hovea, a striking sight with its masses of purple pea-shaped flowers.

Between Caloundra and Noosa Heads, the road was never far from the coast, the vegetation reminding one of our coastal heathlands. A striking plant was a Banksia species, broad in leaf and having a bud coloured in very distinctive green.

Noosa Heads has a delightful national park occupying the abrupt headland leading to Noosa Head. Vegetation in the park is varied. To a southerner the palms were interesting as was too the huge specimens of a Callitris species (a relation of the Murray Pines). A favourite trip for tourists at Noosa Heads is to the coloured sands of Teewah. This trip is done in a converted 4-wheel drive truck which is driven along the beach to Double Island Point. From Noosa Head to Double Island Point is over 30 miles and the truck covers about 25 miles of this distance. The head is backed by very large sand-dunes and about halfway along the beach for some miles the sands composing the dunes are coloured. The colour range from purest white through various shades of fawn, yellow to pink and the deepest red. The colours are not separated into separate areas and in places many shades of colour were very close together - a rainbow effect.

Hervey Bay was our furthest north and was notable to me by the evident care that had been taken to preserve the natural vegetation along the foreshore.

Inland then to Murgon where the agates come from, and Kingaroy, famous for its peanuts. Kingaroy was striking for the rich glowing red of its volcanic soil, reminding one of illustrations of Central Australia - the richness of its colour only however. On our way to Toowoomba we crossed a spur of the Bunya Mountains and here saw groups of Bottle Trees, which are relatives of the Kurrajongs. Toowoomba is a lovely city though its temperature reminded us forcibly of home. It was here that we heard the Pied Butcher-bird at its best. Nearly always the first bird at dawn, its clear fluting note stands out in the dawn chorus of bird song. The bird itself is worthy of its song, being most dapper in black and white. Miss Galbraith's friends, the Lambs of Toowoomba, have a family of these birds which they feed regularly. The young birds in this group resembled our Grey Butcher-bird and do not gain adult plumage until they are two years old.

(Cont'd over.)

SOME HIGHLIGHTS OF A TRIP NORTH: by Mr. Ern Homann.

In beginning a trip in search of sunshine, with eighteen days of rain out of the first three weeks is hardly a happy start, but the sunshine was there, true to label after that. According to all local authorities it was a strange season. The Coral trees were blooming in profuse scarlet early in June, around Kiama. Normally the flowering time is late August, but when we returned that way there were few blooms and the leaves had not yet appeared which they normally do after the trees have flowered.

We spent a week at Forster, north of Sydney, and found there a wonderful wildflower garden. Here in sandy soil close to the beach grew a profusion of flowers. Two species of Banksia including *B. integrifolia*, the coastal banksia of our shores which was present all along the coast as far as we travelled, Beard-heath, a bright pink heath-like shrub; Wax-plants, Boronias and Flannel Flowers. It would have been perfect if we had had Miss Jean Galbraith to lead an excursion through the area.

Port Macquarie was our next stop and this resort has much to offer - a delightful climate, a river and surf for the fisherman, pebbles on the beaches for the rock-hunter, wildflowers along the coast and inland where the ranges begin to rise, and historic buildings dating back to the days of convict settlement. The highlight for me was the trip down the coast to Laurieton, the setting for Kylie Tennant's novel 'Lost Haven'. Laurieton is a fishing village on the Haven and backed by a striking mountain, the North Brother, rising for over 1,000' immediately behind the township.

Leaving Port Macquarie we began to pass through areas recently affected by floods. The town of Maclean on the banks of the Clarence River had just finished its clean-up. The Council grader had pushed the silt deposited by the flood from the roadway where it had covered the road from kerb to kerb.

Arriving at Burleigh Heads on the Gold Coast we saw the damage caused by floods which were not very serious, and by ocean erosion which was serious. Buildings affected and threatened were, as one would expect, those built on the sanddune overlooking the beach. The road to Springbrook with its three delightful national parks had been covered by landslides in the five miles of its mountain section. We came down this section just after it had been cleared for traffic and it was an experience to see the raw earth exposed above the road, and the heaps of mud on the lower side.

(Cont'd over ...)

Highlights of a Trip North. (Cont'd)

The Granite Belt has a charm of its own, due I think, to the outcrops of granite boulders which can be seen everywhere, and this pattern continues south into New South Wales at enterfield and Glen Innes. Girraween National Park is near Stanthorpe, the centre of Queensland's section of the Granite Belt. Brilliant golden acacias were blooming in this national park, but I felt that the wildflowers would be very colourful later.

Glen Innes I shall remember for the very helpful lass in the barber's shop who drew me very careful maps and gave me clear directions to go to Kookabookra, some 30 miles out in the bush. Here alluvial tin miners had left huge drifts of treated sand. With much sieving we got some beautiful water-worn crystals of topaz (maybe), and smoky quartz.

And so on to the Warrumbungle National Park which we nearly reached and which we hope to visit next year.

The final highlights of our trip occurred from Singleton via the Putty Road to Windsor. Much of this road passes through sandstone country and was ablaze with wattles, bush-peas, waxflowers and boronias. Further on between Camden and Bulli the giant lily was plentiful along the roadside, some spikes of them being twenty feet high.

Arriving back here in the cold snap at the end of August we were tempted to start all over again.

--- Ern Homann ---

EGRETS: by Judith Wright.

Once as I travelled through a quiet evening,
I saw a pool, jet-black and mirror-still.
Beyond, the slender paperbarks stood crowding;
each on its own white image looked its fill,
and nothing moved but thirty egrets wading -
thirty egrets in a quiet evening.

Once in a lifetime, lovely past believing,
your lucky eyes may light on such a pool.
As though for many years I had been waiting,
I watched in silence, till my heart was full
of clear dark water, and white trees unmoving,
and, whiter yet, those thirty egrets wading.

From 'Birds', a collection of poems for
young people ...

WARRAGUL FIELD NATURALISTS CLUB.

NOTES :

FIRST HONORARY MEMBER: Len Gooding.

At our first meeting in the new venue we celebrated by recognizing one of our keenest and most valued members - Lepidopterist - coleopterist - Mr. C.G.L. (Len) Gooding, in the enthusiastic carrying of a motion granting him honorary Life Membership of the Club.

Len's own enthusiasm and achievement are a source of constant inspiration to our members, either young in years or young in heart and in spirit.

With over half a century of collecting scores of thousands of specimens, Len is still adding new or extremely rare butterflies, moths and beetles to his beautifully kept collections and all his fellow Club members and friends wish him many more years in this absorbingly meaningful occupation.

GENERAL MEETING OF MEMBERS:

Our next Meeting on Friday 20th. October is to be addressed by Mr. Rex Jackson, on the fascinating subject of Grevilleas.

The place of meeting is the Warragul Central State School, and the time of commencing 8 p.m.... Please remember that Random Nature slides commence the meeting.

The Meeting on November 17th. will bring a talk on the Australian Aborigines with emphasis on natural history by Mr. David Frost.

A note from the Editor:

An apology to readers for the transposition of pages 10 and 11. This was not done with the object of making reading difficult, but there seems to have been some shuffling of the stencils. The Editor is typist, printer and publisher, and cannot, therefore, blame some other 'careless' person ...

Congratulations to the newly formed Traralgon Field Naturalists Club, of which some news in subsequent issues. We sincerely wish them well !

WARRAGUL FIELD NATURALISTS CLUB.

Office-Bearers 1967 - 1968.

President: Mr. Jack Brooks, Box 120, WARRAGUL.

Vice-Presidents: Mr. Clive Fisher, Old Bona Vista Road, WARRAGUL.
Mr. Geoff. Foster, 31 Edinburgh Street, WARRAGUL.

Secretary: Mr. Don Steele, Edinburgh Street, WARRAGUL.

Treasurer: Mrs. Betty Steele, Edinburgh Street, WARRAGUL.

Committee: All above.
Mr. Dick Briggs, 59 Brandy Creek Road, WARRAGUL.
Mr. Les Anderson, King Street, WARRAGUL.

MEETINGS: General Meetings of Members are held on the third (3rd) Friday of each month in the Warragul State School (Albert Street).
Meetings commence at 8 p.m. and members are invited to bring items of interest to share with those present.
Friends and visitors are assured of a warm welcome.

EXCURSIONS: Excursions are arranged whenever possible and, as a general rule are two weeks after the General Meeting.
As will be read elsewhere Members and Visitors are invited to join the excursions of the other Clubs in the area.

SUBSCRIPTIONS: The Annual subscriptions, which become due at the end of February in each year are as follows;

Family.	\$1.50	
Single.	\$1.00	
Junior.	50c	(attending school)

The 'Latrobe Valley Naturalist'.

Financial Members of the Club will receive a copy of this periodical.

It would be appreciated if members of the Warragul Club would support our sister Club by forwarding contributions whenever possible.

We acknowledge the generosity of the Latrobe Valley Field Naturalists Club in granting us the privilege of receiving copies of their excellent publication.

Don. Steele.

SECRETARY.

FUTURE MEETINGS:

September 15th.	Mr. Roy Wheeler.	Birds.
October 20th.	Mr. Rod Jackson.	Grevilleas.

LATROBE VALLEY FIELD NATURALISTS

CLUB.

Yallourn,
Gippsland,
VICTORIA.

Office-Bearers 1967/1968.

President: Mr. E. Homann, 84 Hennessey St., Moe.
Vice-Presidents: Messrs. J. Peterson, F.E. Jones and G.T. Scanlan.
Treasurer: Mr. E. McElroy, 35 Latrobe Street, Morwell.
Excursion Sec'ty: Miss N. Rossiet, Railway Avenue, Yallourn.
Publicity Officer: Mrs. Bon Thompson, Traralgon South.
Hon. Editor: c/o Latrobe Valley Co. Hospital, Yallourn.

Hon. Secretary: Mr. S. Belgraver, 179 Lloyd Street, Moe.

General Meetings:

Are held at the Yallourn State School on the 4th. Friday of each month, commencing at 7.30 p.m.. A programme of proceedings may be obtained from the Secretary.

Excursions:

These are in the nature of field days under competent leaders and are held, usually, on the Saturday following the general meeting. At least two 'camp-outs' are arranged each year.

Visitors:

Are always welcome to attend meetings and excursions.

Subscriptions:

Annual subscriptions are due after the end of February in each year.

Rates are: -

For Adults (singles).	\$1.50
For Families. (Human)	\$1.50
For Juniors.	.10c.

The 'Latrobe Valley Naturalist' is the official publication of the Club and can be posted only to financial members of the Club. This is necessary under Commonwealth Postal Regulations for registration purposes.

Contributions are invited from members and others genuinely interested in the natural features, and the flora and fauna of the world in which we live. These may be sent to the Hon. Editor.

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NOVEMBER, 1967



protect and enjoy

LATROBE VALLEY NATURALIST

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LATROBE VALLEY FIELD NATURALISTS CLUB.

YALLOURN. VICTORIA.

Dear Fellow Field Naturalists,

General Meeting (L.V.F.N.C.) - Friday 24th. November:

The speaker is to be Miss Ashton and her subject 'Aquatic Plants' - plants that grow in water - plants inhabiting the fresh-water aquatic environment.

Time of the commencement of the meeting is the usual 7.30 p.m., and the place of meeting the Yallourn State School. This is the last scheduled general meeting for the year 1967 and members are urged to attend what promises to be a most interesting and valuable talk by Miss Ashton.

Excursion Saturday 25th. November: The excursion is to be to the pools on Anderson's Track, which runs approximately north-west of Yallourn North. However, it is intended to meet at the turn-off from the Moe-Walhalla Road, about six miles from Moe. The Secretary, Mr. Belgraver, intends to be at the turn-off before the time of meeting - 1.30 p.m. - for the benefit of those who are not acquainted with the area. He should be seen on the eastern side of the road.

The excursion is to be a follow-up of the talk on the Friday night, and Miss Ashton will be the leader. There should be at least two (we hope) pools with sufficient water and growth to make the excursion worthwhile.

Report of the Executive Meeting held at the home of Mr. & Mrs. Ern Homann at 84 Hennessey Street, Moe, on the night of Monday 6th. November: -

Car Stickers: Although a report from Miss Betty Kemp, of the Car Sticker Project, was not available, it is understood that there has been some slackening off in the sales of the Field Naturalists Car Sticker which has been sponsored by this Club. The results have, of course, been most satisfactory, and they have been distributed over a wide area of Australia. A further effort is to be made after the beginning of 1968 to induce other Clubs to become a part of this valuable identification scheme. Incidentally, have all readers obtained a Car Sticker from the Secretary? They may be attached to any kind of vehicle, even, as with Miss Jean Galbraith, to a suitcase, and will almost certainly serve as a passport to interesting company on your travels. And, as you travel about, look for the familiar Grass-tree transfer on the rear window (or someone's suitcase) of a motor vehicle.

(Cont'd over ...)

Editor's Notes Cont'd.

'The Naturalist': The Editor reported that the deadline for contributions to this month's issue was the 10th. of November. This time has come - and gone - without the hoped for articles from the three associated Clubs. The pages of this modest publication are open to members of the Latrobe Valley, Traralgon, Warragul and Sale Field Naturalists Clubs, and the members are not only invited but are urged to contribute anything which might be of interest to fellow naturalists.

There will be an issue of the 'Naturalist' for December, and it is hoped that the December issue will include a programme of meetings and excursions of at least the L.V.F.N.C. for the year 1968. Other Club secretaries may also provide any indication their Clubs might have for activities in the coming year.

Classes in Natural History: No finality has been reached in the matter of providing classes for members and others in elementary aspects of natural history. It is hoped that a reply from the Adult Education Association of Victoria may be available at the December meeting of the Executive so that arrangements may be continued.

Photoflora 1968: Reference was again made to Photoflora 1968, which will have a showing at Morwell on Friday 22nd. March 1968.

Next Meeting of the Executive Committee: This will be at the home of Miss N.T. Rossiter, 29 Railway Terrace, on Monday 4th. December at 7.30 p.m..

Next General Meeting of the Members of L.V.F.N.C.: As stated on page 1 there will be no general meeting in December of this year, and the next scheduled General Meeting is to be on Friday 19th. January 1968 at the Yallourn State School. This is, as members will know, to be a 'members' participation' night, where slides, with a taped commentary are to be shown. There are no stringent conditions attached to entry - it is suggested that members submit a maximum of five slides each of any subject of a natural history nature - and the photographic quality does not need to be of international exhibition standard. It would be appreciated if descriptions of the slides to be submitted, and probably the slides themselves could be made available to the Secretary or Editor at some time very early in January next.

Traralgon Field Naturalists Club: Particulars of the new Club will be found towards the back of this issue. The names of the Office-bearers - with Dr. D.W. Collins as Secretary/Treasurer - indicate busy people who will undoubtedly do all that is possible to make the Club a successful one. Once again, good wishes !

(Cont'd over ...)

Editor's Notes Cont'd.

Excursion Secretary: The name of the Excursion Secretary, Miss N.T. Rossiter, has been wrongly spelt in the September, October and this issue - on the inside of the back page. This is regretted, but this correction in the spelling enables her telephone to be quoted, which is Yallourn 5 2392. If she is not available, Mrs. Lorna Padfield, the Assistant/Excursion Secretary could be tried at her home, 42 Strzeleckie Road, Yallourn, telephone 5 2581.

'Key to the Ferns' by Mr. Peter Turner of Sale: It is hoped that this valuable work, in which Mr. Turner had the ready co-operation of Miss Jean Galbraith, will go to members with this issue of the Naturalist. We are grateful to him for all the careful work that he has put into the preparation of the 'Key'.

A Correction: In the May 1967 issue of the 'Naturalist' under the heading of 'A Geological Note' on page 12, I referred to an interesting anticlinal fold to be clearly seen in a fairly recently made road cutting, which I placed at about six miles north of Pakenham, just beyond Pakenham Upper. My notes of the trip were inadequate, and, in any case, almost indecipherable, and since writing the note I had been plagued with a certainty that the stated location was 'way out'. On the 26th. of August (Sunday) I travelled to Melbourne by that former route back from Healesville, and with a very red face, must now acknowledge that the cutting, and the very excellent example of folding, are located at exactly 18 miles, according to my speedometer trip record, which means about 6 miles north of Cockatoo and the 18 miles, of course, beyond Pakenham. I have a passing regret that no one has been (apparently) in a position to provide a correction !

----- G.T. Scanlan -----
Hon. Editor.

EXCURSION TO BLACKWARRY SCENIC ROAD Saturday 23rd. September: by Mrs. Bon Thompson.

The excursion was undertaken to see the wattles, and many of them were in bloom, those not yet showing were pointed out. A visit later when these plants are in bloom would also be rewarding.

Many ferns were seen on the morning of the journey, large areas of hard water fern, batwing fern, kangaroo fern and many tree ferns. Two eucalypts new to most of us were the Yellow Stringybark (*E. Muelleriana*) abundant in the Yarram area, and another thought to be the Mountain Gum (*E. dalrympleana*), but it was decided desirable to send to Melbourne for identification.

(Cont'd over ...)

Blackwarry Excursion Cont'd.

Three daisy bushes were identified - the twiggy daisy bush (*Olearia ramulosa*), the snow daisy bush (*O. lirata*), and the musk daisy bush (*O. argophylla*), the balm mint bush (*Prostanthera melissifolia*); and the mountain correa (*C. lawrenciana*).

Just before lunch we enjoyed a concert by a lyrebird and admired his repertoire. Here also we found a new area for a wattle very like *Acacia falcatifolia*, but without the glands. Mr. Rogers believed it was a species that is waiting to be named. The sunshine wattle (*A. botrycephala*) was in seed but many other wattles were in bloom - Prickly Moses (*A. verniciliata*) with its long catkins, Spike Wattle (*A. oxycedrus*) with the very strong points to the leaves, the very variable Sallow Wattle (*A. mucronata*), the Blackwood (*A. melanoxylon*), the Silver Wattle (*A. dealbata*), and another one new to most of us, the Sticky Wattle (*A. howittii*). The young leaves were very sticky when pressed between the fingers, the leaves were small and the flowers in balls, so that the whole effect was lacy for a wattle tree.

The Rough coprosma (*C. hirtella*) was in flower with the styles protruding well beyond the tiny flowers. The Mistletoe (*Amyema pendula*) had its lovely drooping red flowers everywhere and the Clematis (*C. aristata*) was covering trees with its white stars. The narrow-leaved variety of Elderberry panax (*Tieghemopanax sambucifolius*) had some of us puzzled.

As we neared Gormandale there were many of the Grass-trees that are pictured on our car stickers (*Xanthorrhoea australis*), and many of the spring flowers, Purple Coral Pea (*Hardenbergia violacea*), Pink Beard Heath (*Leucopogon ericoides*), the lovely Pink Bells (*Tetrathoea pilosa*), Common Beard Heath (*Leucopogon virgatus*), the colourful red pea Running Postman (*Kennedya prostrata*), the lovely yellow and red pea flowers of the Golden Bush Pea (*Pultenaea gunnii*), the Hop Bitter Pea (*Daviesia latifolia*), the wild Violet (*Viola hederacea*), the little blue Daisy (*Brachycome angustifolia*) var. *heterophylla*), the beautiful long red bells of Correa (*C. reflexa*), the white Caladenia (*C. alba*), with many variations in colour, and also the Musky Caladenia (*C. angustata*), the Alpine Greenhood (*Pterostylis alpina*) with its erect striped hood, and many Candles (*Stackhousia monogyna*).

The Wedding Bush (*Ricinocarpus pinifolius*) was starting to flower. Many of the plants in the Gormandale Reserve were in flower and it was here that the party had afternoon tea, and Mr. Rogers, who had so well led the excursion, was thanked for what had been a most enjoyable and informative day.

NASTY ! A strange Story of Vandalism.- by R.N.Auchterlonie.

One day last month, a little group of members met by arrangement at the Hazelwood Arboretum for the purpose of watering and mulching the recently planted trees. We had occasion then to comment on and admire a particularly attractive specimen of one of our native conifers, Callitris rhomboidea. One of the original planting, this tree was thriving, about five feet high, and three feet across, of dense, compact growth, with the terminal branchlets drooping and curled in most intriguing fashion.

To resume our work, we arranged to meet again a fortnight later. Imagine our feelings when we found, where this tree had been, a gaping hole in the ground, surrounded by sods of earth, and our beautiful tree missing.

This was the only tree of its kind in the Arboretum, and indeed, could well be the only one in this part of Gippsland as it is uncommon, and not usually stocked by nurserymen. In view of its size, the dryness of the ground, and the warm dry weather, it would stand a poor chance of survival.

Morwell police have been notified.

----- R.N.Auchterlonie -

PLATYPUS IN BERRY'S CREEK: by Mrs. Ellen Lyndon.

There is a very pretty drive from Mirboo North down the back road to Berry's Creek where it rejoins the Coast Road. It is a winding gravel road that falls steeply, following the windings of the creek, a favourite stream for trout fishermen. It is highly developed farming country but at one time coal was mined there. It was to look at the remains of this industry that we left the car and walked down to the creek in the afternoon, and there was a platypus disporting itself.

No doubt this narrow valley was once a splendid fern gully, well furnished with all the usual plant communities, and who knows what rarities besides. Today the country is bare and green. Nothing remains of the tramway and the viaduct but some rusting rails and a few logs spanning the creek bed. The tunnel mouth yawns forlornly at the

(Cont'd over ...)

The Platypus in Berry's Creek Cont'd.

foot of the opposite hill. It is prospected sometimes for bats, as fauna records show. In its heyday fine quality black coal was mined here, local people will tell you. Charles Dalcy in 'The Story of Gippsland' relates that in 1882 a steeply dipping coal seam was discovered on the creek. An underlay shaft was sunk and up to 1930, when operations ceased, about 2000 tons of coal were raised.

To return to my platypus story, all of a sudden there was this drowned cat floating just below the surface of the water, then the duckbill came up and the broad tail took shape at the other end. Pale eyelids rolled back, it seemed to me. (Troughton, in 'Furred Animals of Australia', says that both eye and ear are shut within a facial furrow during submergence). There was the platypus facing upstream, wiggling gently in the current as if anchored at the head. Presently it submerged again and I seized the opportunity to move softly to a closer vantage point on the high bank. I had just settled down when the platypus rose directly beneath me and lay in the lee of some floating weed. Had I remained perfectly still it would have noticed nothing amiss, but I moved my knee and slap ! splash ! went the beaver-like tail and the beast was gone.

At this juncture the original finder had arrived back at the scene with his camera, but though we watched the platypus surface again at fairly regular intervals, it was extremely wary and avoided our bank. Although at times it travelled downstream under water with the current, it always surfaced facing upstream. Looking down at a platypus in the water one gets no idea of the thick deep fur that it bears, for the coat looks waterlogged and sodden. We cannot say that they are common these days, but most of our streams still support a few platypuses.

----- Ellen Lyndon -----

BIRDS FOUND NESTING IN THE TYERS AREA: by Keith Lambert.

The Mistletoe bird (*Dicaeum hirundinaceum*) is one of the most interesting birds to build near homes and I have observed six completed nests over the last three years. Of these six, one was destroyed by vandals and the three eggs were lost, one was never used, two were not properly observed by me but I assumed that they were satisfactory rearings. The last two I observed very closely and one hatched three young, but only reared two, and the last one hatched two and one of these caught his leg in the nest and it was left to starve to death.

This year has been very rewarding as already I have found the nest of a very fascinating bird, the Orange-winged Sittella (*Neositta*

(Cont'd over ...

Birds in the Tyers Area Cont'd.

Chrysoptera) in a Messmate tree at about 50' from the ground. It is very hard to photograph as one can only get to within six feet of the nest, but a few shots have been taken and we are eagerly awaiting results.

Another sighting to note is that of a pair of Little Falcon (*Falco longipennis*). They have taken over an old Crow's nest, but as yet there are no eggs.

Other nests to date are: -

Whistling Eagle (*Haliastur sphenurus*) with two eggs; White-faced Heron (*Notophoxyx novae-hollandiae*) with two eggs and two young in it; the Yellow Robin (*Eopsaltria australis*), and Noisy Miner (*Myzantha melanocephala*) many nests.

----- Keith Lambert -----

EXCURSION TO LABERTOUCHE: by Miss Nancy Rossiter.

On Sunday October 15th. a highly successful excursion was held under the able leadership of Mr. and Mrs. Brooks of the Warragul Field Naturalists Club. Members from Sale, Traralgon, Warragul and the Latrobe Valley Field Naturalist Clubs took part in the outing.

Starting from the Labertouche turn-off from the Princes Highway, three wildflower reserves were visited. As on a previous excursion on November 7th. 1964 members were delighted with the colourful display of wildflowers in this area. The earlier excursion has been fully reported by Miss Betty Kemp in Issue No. 13 of the L.V.F.N.C. Newsletter, and members should refer to this report for a list and description of the species seen. To be added to that list are: -

(1) Baeckia ramosissima or Rosy Heath Myrtle, a charming low-growing almost mat shrub, with narrow leaves and small delicate pink flowers. It is illustration No. 114 in the new edition of 'Wildflowers of Victoria' by Miss Jean Galbraith.

(2) Pultenaea mollis, now regarded as the same species as *P. angustifolia* and both now combined under the former name. This is a graceful shrub of about 6' with soft hairy branches (*mollis* - Latin = soft) and many brown and yellow flowers in terminal clusters.

(3) Phebalium bilobum or Truncate Phebalium. A tall dark green shrub with starry white flowers and of interest because it is the Baw Baw form of the species which differs from that growing in the Grampians in being much taller and in having longer leaves which are not bilobed.

LYREBIRDS by Judith Wright.

Over the west side of this mountain,
that's lyrebird country.
I could go down there, they say, in the early morning,
and I'd see them, I'd hear them.

Ten years, and I have never gone.
I'll never go.
I'll never see the lyrebirds -
the few, the shy, the fabulous,
the dying poets.

I should see them, if I lay there in the dew:
first a single movement
like a waterdrop falling, then stillness,
then a brown head, brown eyes,
a splendid bird, bearing
like a crest the symbol of his art,
the high symmetrical shape of the perfect lyre.
I should hear that master practising his art.

No, I have never gone.
Some things ought to be left secret, alone;
some things - birds like walking fables -
ought to inhabit nowhere but the reverence of the
heart.

From her collection 'Birds'.

A TRIP INTO THE OUTBACK: by Mr. Tom Moretti.

On a recent trip to Mildura I was fascinated about a trip advertised into the dry area of New South Wales - it seemed all out of order - so I thought that 'seeing was believing' and we left Mildura in a Kombi bus. We could not use our own transport because we would be travelling on private property for many miles.

We left the bitumen about four miles over the River Murray and the country immediately became dry and barren where grazing is at one sheep to fifteen acres. As we continued to travel in a northeasterly direction the native timber became more stunted, the saltbush and porcupine grass was more prevalent, and the first wildlife we saw was a lonely grey kangaroo. However, the further we travelled the more numerous they became until we eventually saw the big red kangaroos, crested pigeons, black-backed magpies, galahs, crows, wedge-tailed eagles and many species of our beautiful parrots.

(Cont'd over ...)

Trip into the Outback Cont'd.

The rainfall in the area is very low and to get the benefit of what does fall the rain has to fall in heavy downpours to get a run-off, all the land is contoured to carry the water to one main tank where it is pumped by windmills to homesteads and stock.

We had lunch in the shearers' quarters of Urumpa Station, where our bus driver has to report when is going to cross what was at one time a huge lake. The point where we crossed was seven miles in a straight line. We saw emus with chicks, more kangaroos and merino sheep. On the far side of the lake was an intriguing land where we saw a great wall of fine white sand of seventy to one hundred feet deep and seventeen miles long. The harder places reminded me of the 'smoking' cliffs on Wilson's Promontory, where there is a continual wisp rising. In the places where there are hard and soft formations the water has cut out canyons in miniature.

There are to be found trace of fossil sea life and shells in various places and the timber is driftwood worn by the continual action of the cutting sand.

On the return journey we had to report back to the station as they would not like tourists to be lost in that area. We then had afternoon tea, and set out for the trip home where we detoured through other stations; on one of these was a tank built in haste some two years ago following a weather report to the effect that rain was on the way. However, the rain did not eventuate and the tank is still empty.

On Urumpa Station there is a shearing shed 100 years old which had been built by Chinese labour out of timber which is not considered to long-lasting - just plain round Murray Pine, the logs dropped in like a log cabin, and the cracks sealed with mud.

The greatest distance we were from Mildura was eighty miles, but it was a trip well worth the taking for anyone interested in natural history. One grim piece of knowledge learnt was that the station was permitted to destroy 1,000 kangaroos each month !

----- Tom Moretti -----

Warragul F.N.C. Meeting Friday November 17th.

Mr. David Frost is to give a talk on 'The Australian Aborigines' with emphasis on natural history.

Latrobe Valley Naturalist.

WARRAGUL FIELD NATURALISTS CLUB.

PRESIDENT: Mr. Jack Brooks, Box 120, WARRAGUL.
VICE-PRESIDENTS: Mr. Clive Fisher, Old Bona Vista Road, WARRAGUL.
SECRETARY: Mr. Don Steele, Edinburgh Street, WARRAGUL.
TREASURER: Mrs. Betty Steele, Edinburgh Street, WARRAGUL.
COMMITTEE: All the above with: -
Mr. Dick Briggs, 59 Brandy Creek Road, WARRAGUL.
Mr. Les Anderson, King Street, WARRAGUL.

MEETINGS: General Meetings of members are held on the third Friday of each month in the Warragul State School (Albert Street). Meetings commence at 8 p.m. and members are invited to bring items of interest to share with those present. Friends and visitors are assured of a warm welcome.

EXCURSIONS: Excursions are arranged wherever possible and, as a general rule, are two weeks after the General Meeting. As will be read elsewhere members and visitors are invited to join the excursions of the other Clubs in the area.

SUBSCRIPTIONS: Annual subscriptions, which become due at the end of February in each year are as follows:-

Family.	\$1.50
Single.	\$1.00
Junior.	50c (attending school).

The 'Latrobe
Valley Natural-
ist'.

Financial members of the Club will receive a copy of this periodical, and it will be appreciated if members will support our sister Club by submitting contributions wherever possible.

Don Steele.

SECRETARY.

Latrobe Valley Naturalist.

TRARALGON FIELD NATURALISTS CLUB.

TRARALGON. VICT.

OFFICE-BEARERS:

PRESIDENT: Mr. Geoff. Proudfoot, 25 Dunbar Road, Traralgon.
VICE-PRESIDENT: Mr. G. Valentine, 36 Chenhall Crescent, Traralgon.
SECRETARY/TREASURER: Dr. D.W. Collins, 4 Charles Street, Traralgon.
EXCURSION LEADER & PUBLICITY OFFICER: Mr. G. Marshall, Elliott Street, Traralgon.
EXECUTIVE COMMITTEE: The above (temporarily).

MEETINGS:

General Meetings are held at the Grey Street State School on the second Friday in each month at 7.30 p.m..

EXCURSIONS:

For the first few months the excursions will be visits to local areas of interest, and will cater especially for members who are new to field naturalist work.

Excursions are held on the Sunday following each monthly meeting.

SUBSCRIPTIONS:

\$1.00	Single Membership.
\$1.50	Family Membership.
.25c	Junior Membership.

The Latrobe Valley Naturalist will be posted to financial members of the Club;— for the first year of the Club members requiring 'The Naturalist' will be required to pay 50c in addition to the above.

D.W. Collins.
Secretary/Treasurer.

LATROBE VALLEY FIELD NATURALISTS

CLUB.

Yallourn,
Gippsland,
VICTORIA.

Office-Bearers 1967/1968.

President: Mr. E. Homann, 84 Hennessey St., Moe.
Vice-Presidents: Messrs. J. Peterson, F.E. Jones and G.T. Scanlan.
Treasurer: Mr. E. McElroy, 35 Latrobe Street, Morwell.
Excursion Sec'ty: Miss N. Rossiet, Railway Avenue, Yallourn.
Publicity Officer: Mrs. Bon Thompson, Traralgon South.
Hon. Editor: c/o Latrobe Valley Co. Hospital, Yallourn.

Hon. Secretary: Mr. S. Belgraver, 179 Lloyd Street, Moe.

General Meetings:

Are held at the Yallourn State School on the 4th. Friday of each month, commencing at 7.30 p.m.. A programme of proceedings may be obtained from the Secretary.

Excursions:

These are in the nature of field days under competent leaders and are held; usually, on the Saturday following the general meeting. At least two 'camp-outs' are arranged each year.

Visitors:

Are always welcome to attend meetings and excursions.

Subscriptions:

Annual subscriptions are due after the end of February in each year.

Rates are: -

For Adults (singles).	\$1.50
For Families. (Human)	\$1.50
For Juniors.	.10c.

The 'Latrobe Valley Naturalist' is the official publication of the Club and can be posted only to financial members of the Club. This is necessary under Commonwealth Postal Regulations for registration purposes.

Contributions are invited from members and others genuinely interested in the natural features, and the flora and fauna of the world in which we live. These may be sent to the Hon. Editor.

ISSUE No. 48.

DECEMBER, 1967



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LATROBE VALLEY NATURALIST

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LATROBE VALLEY FIELD NATURALISTS CLUB.

YALLOURN. VICTORIA.

Editorial:

Dear Fellow Field Naturalists,

General Meeting January 19th. 1968. Members are reminded that the January meeting will take the form of a members' participation night, with slides (up to five each member) provided by members and, it is hoped, a taped commentary compiled from the descriptions of their slides by members. The success of this night will depend on the extent of the support and the slides and descriptions being received in sufficient time for arranging. To the Secretary or Editor please !

It will be noted that the above date is a week earlier than the usual meeting night - this is because the following weekend is the 'camp out' at the property of Mr. Keith Rogers at Wulgulmerang, and some members will be departing on the Friday afternoon or evening, in order to get the most from the weekend.

The week end at Wulgulmerang, under the care of our naturalist host, should be greatly rewarding to members whatever their interest. Botany for the botanists, birds for the 'birdos' and a variety of animals for the other fauna fanatics; natural features, rocks and minerals in great measure for the geologists, and delightful, even spectacular scenery for those with no particular natural history interest. A cordial invitation is extended to members of other clubs, and any others interested to join L.V.F.N.C. members on this excursion.

Details will appear in the January issue of the Naturalist.

Traralgon F.N.C.- January Excursion: For the benefit of Traralgon Field Nats. and members of the other clubs to whom this magazine goes, reference is made to the excursion to be held on Saturday 20th. January to Mt. Erica. It will be led by Miss Joan Galbraith or, if she is unable to do so, by Mr. Graham Marshall, both of whom know the botany and other natural features of the area extremely well.

Meeting Place: Methodist Church Traralgon at 9.30 a.m. or at Parkers Corner 10.30 a.m...

The Traralgon Secretary, Dr. D.W. Collins, extended the usual cordial invitation to others to attend. This excursion could be used as one providing some hill-climbing experience for those going to Wulgulmerang in the following week - or be an interesting outing for those unable to go away for the long weekend.

(Cont'd over ...)

Editorial Cont'd.

Meeting of the Executive Committee: The meeting held on Monday 4th. December was at the home of Miss N.T. Rossiter, Yallourn.

Reporting of Features Threatened with Destruction: This matter, referred to at the last general meeting, was again discussed, and members are asked to report to the Secretary any natural feature which appears to be threatened in any way by proposed development, by the erection of power or other lines, road clearance or widening etc., etc., in order that representations may be made to the appropriate authorities.

Classes in Natural History: The possibility of classes commencing in 1968 is now much more promising, following a reply to the Secretary by the Council of Adult Education in Melbourne. More of this, it is hoped in the January issue.

Programme of events for 1968: It was hoped that the programme would be available for distribution with this issue, but replies were still awaited to provide a speaker or speakers to meetings. It is now hoped that January will include it.

Traralgon Field Naturalists Club: Secretary of the Traralgon F.N.C. has advised that Club arrangements for the first two months of 1968, and the excursion is referred to on Page 1 - for January. There is no general meeting of members for January.

February: General Meeting. The speaker is to be Mr. D. Altermann, M.P., on the subject of "Shells". Place of meeting is at the Gray Street State School, commencing at 7.30 p.m.. Date, 9th. Feby.

Excursion: The excursion for February is to be on Sunday 11th. February, and to the seashore between Inverloch and Cape Paterson. The meeting place is the Methodist Church, Traralgon at 9.30 a.m., or for those who wish to go there directly, 11.30 a.m. at The Glades, Inverloch.

The 'Naturalist'. This issue marks the end of another calendar year, and is also the 48th. issue of the magazine. Opportunity is taken to thank the contributors who have made it possible to reach the round four dozen issues. May I, like Oliver Twist, but without the prophecy that followed his request, 'ask for more' from them, who have made it possible for us to learn so much more about the things in which we have a mutual interest. I also ask for forgiveness for the errors, typographical and other that have already been made, and forbearance in respect to errors still to be perpetrated.

And seasonal good wishes? Would a sincere wish for rain, in the needed places, be acceptable? All good things to all men!

G.T. Scanlan.
Hon. Editor.

OBSERVATIONS OF THE WEDDING BUSH: by Mrs. Bon Thompson.

The Wedding Bush (*Ricinocarpus pinifolius*) flowered beautifully in the Traralgon South Reserve this Spring. It is a plant that has separate male and female flowers. Mostly both flowers are on the one plant; but there were three bushes with only female flowers. About October 6th. the bushes were covered with red buds and many female flowers. These flowers had short thick stalks (12 mm. long), usually five white petals, and deep down in the petals was the ovary. From the centre of the ovary the orange-tipped styles spread out and upwards in pairs. The ovary appeared smooth to the naked eye, but under the microscope it could be seen to have transparent, or very pale green 'pimples'. These 'pimples' commenced to grow into little pale green protuberances, even before the petals withered, and by the time the petals and sepals had fallen these protuberances had increased in length and turned deep red with a glistening knob on the top. As they continued to grow they turned green and gave the seed a wooly appearance, soft to touch.

By October 22nd. both male and female flowers were in full bloom. However, the three bushes had only female flowers and no buds left. The male flowers had long thin stalks (3 cm. long), from five to eight white petals, a tapered centre covered with about 30 stalked balls of pollen and the whole centre protruding 4 mm. above the petals.

Each female flower was surrounded by three to four higher male flowers and with two leaves all grew from the end of the branchlet. By November 4th. it was very difficult to find any female flowers but the male flowers were abundant and continued to flower for at least another three weeks. Meanwhile the ovary of the female flowers had increased to almost one inch across.

Although the bushes with only female flowers were surrounded by normal bushes with plenty of male flowers nearby, I was only able to find one seed on the three bushes. The petals and sepals had withered but had not fallen. Why did the insects neglect these flowers? Or is the Wedding Bush pollinated by some other method?

----- Bon Thompson -----

BIRDS AND THEIR TASTE FOR FOOD: by Miss Joan Galbraith.

All Field Naturalists are not ornithologists but I think all enjoy watching birds, and most of us who do so make small interesting discoveries from time to time. I have been interested in the various foods that appeal to birds visiting the bird table. One expects nectar (sugar and water) to attract honeyeaters, and it does, but I notice that two of the five species visiting and taking nectar at present (December) are also fond of coconut. Yellow-faced Honeyeaters take it almost as frequently as nectar, and Eastern Spinebills take it quite often.

Birds and Their Taste for Food. (Cont'd).

We all know that both Thrush and Yellow Robin like cheese better than most foods, but a visiting Thrush is almost equally fond of coconut (put out for the Blue Wrens, which also like cheese). Indeed Mrs. Thompson tells me the wrens have definite cheese preferences, never touching cheddar (in her garden anyway) if they can get tasty cheese, though they will eat the cheddar after finishing every crumb of tasty.

Since I provide only cheddar cheese my Blue Wrens cannot show their discrimination - but they always take cheese in preference to coconut, coconut in preference to cake or biscuit crumbs, and bread-crumbs only if there is nothing else.

It is interesting also to see Brown Thornbills busily sipping nectar if any is accessible to their short beaks. I do not think this is merely as a drink as there is always water in the bird baths. Apparently they like sweets as well as savoury food.

----- J. Galbraith -----

FERNS OF LILLY-PILLY GULLY: by Mrs. E. Lyndon.

I was very doubtful about venturing into this lovely gully again, knowing that the bushfires of 1951 had left it thoroughly desolated. When I asked Mr. Millar about it he said that the place had recovered to such an extent that it was now one of his show places, and I think that we all found the flower-bordered track in was quite delightful.

The charm of this particular gully had been its rainforest vegetation, in which huge *Eugenia* trees predominated. There is another such association where the track cuts across a gully on the northern side of the Promontory. It apparently escaped the fires. It is unusual to find the Lilly-Pilly so far from its normal habitat in Eastern Gippsland.

Several minor creeks were crossed on the way in with very healthy looking young *Eugenias* up to twenty feet in height. Several fern species were noted here. *Culcita dubia*, the common Ground-fern; *Hypolepis punctata*, a Downy Ground-fern; another of the Ground-ferns, not positively identified; *Pteris tremula*, the Tender Brake; *Doodia media*, the Rasp-fern; *Lindsaya linearis*, the Screw-fern; *Adiantum aethiopicum*, the Maidenhair, and, of course, the Austral Bracken. *Drymophila cyanocarpa*, the Turquoise Berry, was an interesting plant observed along the track.

(Cont'd over ...)

Ferns of Lilly Pilly Gully Cont'd.

We have chosen a particularly dry year to inspect this gully on the upper reaches of Tidal River and the fern-covered flat is somewhat parched. Proper overhead cover for the ferns is still lacking although the Eucalypts have made better growth and we were pleased to see the Koalas there.

There are hundreds of seedling *Eugenias* up to a foot in height, a few more advanced trees standing up through the rotting logs on the ground, and many skeletons of an older generation with perhaps sufficient life left in them to put forth an occasional bunch of leaves.

A somewhat hasty check on the ferns, working upstream from the fireplace, yielded the following species: - *Todea barbara*, the King Fern; *Cyathea australis* and *cunninghamii*, the Rough and Slender Tree-ferns; *Dicksonia antarctica*, the Soft Tree-fern; *Histiopteris incisa*, the Batwing Fern; *Microsorium diversifolium*, the Kangaroo Fern and *M. scandens*, the Fragrant Fern; *Asplenium flaccidum*, the Weeping Spleenwort; *Rumohra adiantiformis*, the Leathery Shield-fern; *Polystichum proliferum*, the Mother Shield-fern; *Lastreopsis shephardii*, the Shiny Shield-fern; *Blechnum patersonii*, the Strap Water-fern; *B. nudum*, the Fishbone Fern, the most plentiful fern present, occurring often in its bipinnate form. *Fieldia australis* was there on the tree-fern trunks.

Lindsaya cuneata, the Oval Wedge-fern, is known in Victoria from a single collection in this gully back in 1909. To the best of my knowledge it has not been recorded since. Naturally a very sharp lookout was kept for this tender fern, this green gold, should I say?

----- E. Lyndon -----

GUINEA FLOWERS: by Nuri Mass.

Guinea plants that stand, or droop, or, rambling, twine;
Golden flowers like spangles bright that gaily shine.
Carpeting the bushland ground with sunny gold--
Petals soft that, oh, so quickly loose their hold !
Pretty little clustered seeds with colours gay --
Guinea plants, just made, I think, for fun and play !

From 'Australian Wildflower Magic'.

WATERPLANT WEEKEND: or An Introduction to the Pondweeds.

The November meeting and the excursion following will surely go down in the annals of the Club as one of the most interesting and botanically valuable weekends of this year. Miss Aston so obviously enjoyed talking about that rather neglected branch of plant study, the Pondweeds, that it was a pleasure to watch and listen, and I'm sure that she was most gratified that we, her audience, showed such keen interest in her talk, her slides, and in the collection of beautifully mounted specimens from the National Herbarium. Typed lists of some 48 species of water-loving plants with their scientific and common names were handed around at the meeting in order that we could follow the lecture more clearly.

The excursion to the swamps in the vicinity of Anderson's Track north of Yallourn was well attended. I counted 13 cars at one stage and they were mostly well filled. The party all appeared intent in Miss Aston's naming and description of the odd things she dredged from the water. We had been able to examine many of the dried plants carefully the night before and now we were able to examine many in the fresh state. We should each have acquired a working knowledge sufficient to enable us to identify a few inhabitants in every pond we come across, in future. It is somewhat bewildering to be shown so many different sorts all at once (I know I suffered some mental indigestion), but if we can remember even half a dozen of them we have a groundwork to build on as opportunity occurs to extend our knowledge of these fascinating plants.

We learned that certain pondweeds produce two very different types of leaves, the emergent ones being usually wide, flat and floating, while those that remain submerged are fine, feathery and much divided or thin, narrow and blade-like. Some, like *Ottelia*, the Swamp Lily, develop a special set of underwater flowers and seedheads with their own system of pollination, as well as the more conventional flowers and seeds that live above the water in the sunlight. Others, like Eel-grass (*Vallisneria*) send up to the surface long stems bearing the female flowers. The male flowers are shed and float free on the water. When pollination has taken place the stem coils like a spring and contracts, drawing the seed back under the water till they mature. When ripe the stem uncoils and pushes the seed to the surface again. Many pondweeds are rooted firmly in the mud, but there are others that float free with pendant rootlets.

At the first pond we found Sphagnum Moss and Swamp Selaginella, with clumps of the tall handsome Tassel Cord-rush and a strand or two of the Slender Club-moss. In the pond itself the luxuriant growth was sorted out into Streaked Arrow-grass, Swamp Stonecrop, and the strings of green rosettes that is Water Star-wort. Next port of call was at a pretty dam into which Water-lilies have been introduced and are well on the way to filling it completely. Several mini-skirted members took off their shoes and waded in to conduct their studies at closer range!

(Cont'd over ...)

Waterplant Weekend. Cont'd.

Rafts of the introduced *Juncus articulatus*, the Jointed Rush, with creeping stems lying all in the one direction, were almost firm enough to walk on. *Eleocharis*, the Tall Spike-rush, bordered the pond in places, some of the thick culms topped with pointed spikelets. What wonderful play spears these must have made for little aboriginal kiddies in days gone by ! *Potamogeton crispus* lay along the water surface, almost entirely submerged. This one is comparatively easy to recognise by its thin dark transparent leaves, much curled and crisped like seaweed. Soft Water-fern, pink flowered Willowherb and Austral Brooklime added to the beauty of the scene, and a pair of Sacred Kingfishers were in residence.

Our final stop was beside the Latrobe Bridge with a little rain beginning to fall. Except for a few tall Manna Gums beauty is a thing of the past here. Many Australian Snipe rose from the river flats and a Pelican flew over. The receding lagoons carried many fine clumps of the Water Plantain, a very ornamental plant when the tall flower stalks lift a cloud of the delicate white blossom above the wide ribbed leaves. Here we were shown Duckweed (*Lemna*) like green rice grains floating and piling up on the shore before the wind. We needed a hand lens to properly appreciate *Wolffia arrhiza*, the smallest of the world's flowering plants and surely the one with the fiercest name for its size ! The first part undoubtedly honors some botanist and the second merely denotes that it is rootless, or wanting true roots. Its minute leaf is no bigger than a green 'full stop'.

Miss Aston asked us to watch out for and report *Aponogeton*, the introduced Capr Pond-lily, a garden escape with large long-oval leaves with wavy edges and fragrant flowers in a terminal spike; and another, a rare indigenous water plant called *Brazenia schreberi*. The round leaves of this one reminded me of those of the garden Nasturtium with stem attached at leaf centre. The under surfaces of its leaves, by the way, are coated with a jelly-like substance or mucilage.

I found, as I drove home on Saturday evening with the dark rainclouds building up ahead of me in the south, that I was taking more notice of farm dams and the little weedy waterholes banked up in the gullies. Wondering what might be found in them inside the golden rings of Buttercups and Waterbuttons. I suspect that a *Wolffia* whistled at me from one of them. I'm sure we are all the richer for hearing Miss Aston's introduction to the Pondweeds.

TERMITES: by G.T. Scanlan.

A few weeks ago, at Moe, I was handed a matchbox containing the dead bodies of insects together with separate wings which had apparently become detached from them. I was told that they had been destroyed with fly spray and was asked: "What are these, are they flying ants?"

The question was not difficult to answer although the creatures were better known to me from their capacity to destroy and their activities in other places. The bodies were those of so-called white ants - but more properly termites - which are not at all closely related to the true ants, nor are they really white. The detached wings, without any other clue, would have fairly indicated the nature of the 'beasties' because of the many species of termites each has the same behaviour pattern which includes the departure from a parent colony each year of winged males and females which, after flight from the nest and dispersal discard their wings, pair in couples of male and female, and found a new colony in a suitable environment, there to spend the rest of a comparatively long life reproducing their kind. That is, of course, if they are able to escape all the hazards attendant upon embarking upon the new life from the parent colony.

Termites are so widespread and numerous in Australia that it was a source of wonder that they were not better known generally than they appeared to be. They have been described as 'one of the most destructive pests in Australia'. They have a tremendous capacity to destroy, but cannot compare in the least degree with that much more superior animal *Homo sapiens*. Proof of this is all about us!

They (the termites) are to be found all over the continent, but appear to be more successful and prolific in the tropics than elsewhere, particularly in the periodic wetter parts. It was in the Northern Territory where I had lived and worked from 1935 until early 1942, and earlier in the Far North and Far north-east of South Australia and in Central Australia, where I had travelled quite extensively during a period commencing in 1922 and off and on until going to the Territory in 1935, that I had become accustomed to the sight of the numerous nest mounds of a great variety of termites, which were a source of wonder and speculation.

It is not necessary to travel so far however in order to see the mounds of termites as they are present almost wherever there is timber and some dampness to enable them to carry out their several functions of destruction and construction. And although these places will usually mean forest areas, they are also content to make their dwelling places in the 'little boxes' inhabited by man, provided there is something in their construction attractive to the palate.

(Cont'd over ...)

Termites Cont'd.

The largest termite mounds (or 'termitaria') that I had seen were on the damp plains of the Northern Territory and in northern Queensland. Some of these reached a height of at least 20 feet, and had proportionate depth and width - they were in places to be seen in their hundreds, giving to the landscape a sinister aspect of huge cemeteries with the headstones of some departed giants. Nearer Darwin, as far as the Territory was concerned, were the 'magnetic' mounds of Amitermes meridionalis, up to 12 feet high, in some cases as long as 10 feet and a width in the vicinity of 4 feet. These mounds are those which are reputed to point North and south with an error, so it is said, of less than one degree. The mounds are conspicuous because of this and the blade-like edge of the top. Of the several theories as to the reason for the 'magnetic' quality of the mounds is that of Dr. Serventy which involves the possibility of adaptation to provide for the optimum of ventilation in the circumstances of the local climate. The large mounds of the northern areas would contain many thousands and, in the opinion of some entomologists, perhaps up to 2,000,000 individuals.

During the building of the Overland Telegraph ^{Line} from Adelaide to Darwin, which was completed in August 1872, termites added to the many other problems associated with working in a rugged country by eating mile upon mile of the wooden poles erected to carry the copper wires, which had to be replaced by steel posts. They also showed a liking for almost anything else that was left in contact with the soil, such as riding and pack-saddles, books, clothing, and even the metal casing of cables, with instruments for 'afters'. In Darwin I had planted a number of young and healthy mango trees, from which I 'drooled' at an anticipated feasting of the juicy, fibrous fruit by my family and myself within a few short years. They made excellent progress until reaching a height of from five to six feet when individual trees drooped and died. When practically all had suffered the same symptoms and ending, I slit the stem of two or three to discover at the top of the stem of each a long, creamy coloured, translucent termite, which had eaten its way up through the heartwood sap until there was none left to provide nutriment to travel to the extremities of the trees which died. Anything at all which had been left on the ground outside the house overnight would be only a shell by the morning, and the structure at the bottom of the garden, which typifies the Australian scene in the absence of sewerage, had, on at least one occasion, collapsed as a mere shell of timber.

The termites, like the ants, some of the wasps and some species of bees are remarkable for the well developed social characteristics. In each colony there are three main castes - the sterile workers, sterile soldiers and the sexual forms, which are known as 'reproductives'. Each caste has a special function to perform, the workers, which may be male or female and usually wingless, perform the necessary tasks such as the gathering of food, construction of the mound nests, and the tunnels which are built for progress to the source of food and other materials, while the soldiers have the responsibility of protecting the members of the colony. The

(Cont'd over ...)

Termites Cont'd.

reproductives, as their name implies, are the caste which has the function of perpetuating their species, and it is these, consisting of males and females, which 'swarm' each year and leave the parent colony, the males and females - those that survive the birds, the lizards, the ochridnas etc., - pairing and each pair commencing the creation of a new colony. The female will do nothing else during its lifetime, which is comparatively long for an insect, than produce eggs which, in due course, will be cared for during hatching by the worker caste.

The food of termites is principally dead wood which is masticated by the aid of appropriate mouth parts but, and this is something to wonder at, the masticated food ^{is} then predigested ^{by} symbiotic flagellate protozoa in the creatures gut.

The termite is destructive from the point of view of man but in fact the function of this insect is similar to that of many other creatures - to prevent the predominant growth of plant life to the detriment of other things animal or vegetable. Constructively, they turn some materials into soil, and they create landforms in the construction of the mounds. Innumerable other creatures are their enemies, and to compensate for this they have the capacity to reproduce in great numbers.

During extensive research into the termites much has been learned of them by entomologists and zoologists - it is to the writings of these workers to which we should refer for a wider knowledge and understanding of these and other creatures with whom we share the earth. This is necessary in order to learn as far as possible the importance of the other animals in the scheme of things.

----- G.T.S. -----

BOOK REVIEW: by the Editor. "A Treasury of Australian Wildlife" edited by D.F. McMichael (Ure Smith) \$7.95

This 'Treasury' is aptly named and contains a selection of specially revised articles from the Magazine Of Natural History, published quarterly by the Australian Museum, Sydney. Dr. McMichael was formerly the Deputy Director of the Museum and is now the Director of the Australian Conservation Foundation, of which the L.V.F.N.C. is a Club member.

As stated on the dust wrapper, the book is primarily a store of good natural history writing by experts in a language intelligible to the least knowledgable of us. The 235 illustrations, of which 35 are in superb colour are valuable adjuncts to the text, and it can be said that this book goes far beyond most of its kind in value of content.

There is a copy in the Yallourn Public Library.

----- G.T.S. -----

Latrobe Valley Naturalist.

TRARALGON FIELD NATURALISTS CLUB.

TRARALGON. VICT.

OFFICE-BEARERS:

PRESIDENT: Mr. Geoff. Proudfoot, 25 Dunbar Road, Traralgon.
VICE-PRESIDENT: Mr. G. Valentine, 36 Chenhall Crescent, Traralgon.
SECRETARY/TREASURER: Dr. D.W. Collins, 4 Charles Street, Traralgon.
EXCURSION LEADER & PUBLICITY OFFICER: Mr. G. Marshall, Elliott Street, Traralgon.
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D.W. Collins.

Secretary/Treasurer.

Latrobe Valley Naturalist.

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VICE-PRESIDENTS: Mr. Clive Fisher, Old Bona Vista Road, WARRAGUL.
SECRETARY: Mr. Don Steele, Edinburgh Street, WARRAGUL.
TREASURER: Mrs. Betty Steele, Edinburgh Street, WARRAGUL.
COMMITTEE: All the above with: -
Mr. Dick Briggs, 59 Brandy Creek Road, WARRAGUL.
Mr. Les Anderson, King Street, WARRAGUL.
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Family.	\$1.50	
Single.	\$1.00	
Junior.	50c	(attending school).

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Don Steele.

SECRETARY.

LATROBE VALLEY FIELD NATURALISTS

CLUB.

Yallourn,
VICTORIA.

Office-Bearers 1967 - 1968.

President: Mr. E. Homann, 84 Hennessey St., Moe.
Vice-Presidents: Messrs. J. Peterson, F.E. Jones and G.T. Scanlan.
Treasurer: Mr. E. McElroy, 35 Latrobe Street, Morwell.
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Publicity Officer: Mrs. Bon Thompson, Traralgon South.
Hon. Editor: Mr. G.T. Scanlan, L.V.C. Hospital, Yallourn.

Hon. Secretary: Mr. S. Belgraver, 179. Lloyd Street, Moe.

General Meetings.

Are held at the Yallourn State School on the 4th. Friday of each month, commencing at 7.30 p.m. A programme of proceedings may be obtained from the Secretary.

Excursions.

These are in the nature of field days under competent leaders and are held, usually, on the Saturday following the general meeting.
Visitors are welcome to both meetings and excursions.

Subscriptions.

Membership subscriptions become due in March of each year. The amount includes the cost of this publication, which is issued each month. Subscriptions are as follows:-

For adults:	\$1.00
For families:	1.50
Juniors:	.10

The 'Latrobe Valley Naturalist' is the official publication of the Club. It can be issued only to financial members of the Club with some few exceptions under postal Regulations.

The responsibility for matter printed in the 'Naturalist' is generally with the contributors. Every reasonable efforts are made to ensure the accuracy of the matter printed herein.

Contributions are invited from members, and others, on any aspect of Natural history which could be considered of interest to the members of the Club. They should be addressed to:

G.T. Scanlan,
c/o L.V.C. Hospital,
YALLOURN. VICT. 3838.

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LATROBE VALLEY FIELD NATURALISTS CLUB.YALLOURN. VICTORIA.Editorial Notes:

Dear Fellow Field Naturalists,

There is very little news for inclusion in this issue.- the Club, as such has been in recess during the holiday season, and some members have been enjoying holidays which would include more individual observation of the things in nature which attract them.

General Meeting Friday 19th. January: This is to be held a week earlier than usual, and will take the form of a members' night, with slides and descriptions taped for convenience of showing. The Warragul F.N.C. meeting is on the same night - at Warragul. There is no general meeting in January for Traralgon Club members.

Wulgulmerang Weekend Excursion: Saturday 27th. to Monday the 29th. January at the property of Mr. Keith Rogers beyond the town of Buchan in East Gippsland. Details not available for this issue, but members will be told the final arrangements at the general meeting on the 19th. January. Those not attending the meeting should contact the Excursion Secretary, Miss N.T. Rossiter, of Yallourn.

Traralgon F.N.C. Excursion: Members are reminded that the Traralgon Club January excursion is on Saturday the 20th., to Mt. Erica, and that meeting places are either the Methodist Church, Traralgon, at 9.30 a.m., or Parkers Corner at 10.30 a.m..

L.V.F.N.C. Programme for 1968: The Editor was over optimistic in hoping that it would be published with this issue. However, there should be news of the programme at the general meeting on the 19th. January.

Articles in this issue of the Naturalist: Mrs. Thompson of Traralgon South, and Mrs. Lyndon of Leongatha are consistent contributors to the Club paper, and members will again read their observations with interest and profit. It is pleasing to include two articles from members of the Warragul Field Naturalists Club - Mr. Gooding with an explanation of the spread of the 'Cabbage White' Butterfly, and Mr. Frost with reference to the Australian aborigine and his closeness to nature. It is hoped that this will prove to be the start of a deluge of articles from members of other F.N.Clubs, as well as from members of the L.V.F.N.C.

G.T. Scanlan.
HON. EDITOR.

NOT OBSERVANT ! By Mrs. Bon Thompson.

Until recently I would have said I was a reasonably observant naturalist in the bush. However, in the last month or so we have identified, with Miss Galbraith's help, the Tree Everlasting (*Helichrysum dendroideum*). This plant is very similar to the Shiny Cassinia (*Cassinia longifolia*). The Common Dogwood (*Cassinia aculeata*) is easy to identify with its fine, short, slightly rough, light green leaves. The Shiny Cassinia has longer, darker green leaves, white beneath and is very similar to the Tree Everlasting. We have these three plants in the Traralgon South area. The flowers of all three grow in flat clusters and at times of very similar size. Of course the two cassinias are very alike with no ray florets or petals and the bracts close to the flower so as not to be noticeable. The flowers are on the ends of the branches.

However, the flowers of the Tree Everlasting are different. While there are no ray florets, the bracts are spreading and give the effect of petals. Besides being on the ends of branches the clusters of flowers can also be on the ends of branchlets of small side branches. The feel of the flower is papery as in many everlastings.

We have found the Tree Everlasting in the Traralgon South Reserve, in the area we hope to reserve on the roadside where the greenhoods grow, in the A.P.M. bush, and even on our own property. I feel it is just lack of proper observation that we have not seen it before. How many other plants are we missing because they are similar to plants we know?

----- Bon Thompson -----

BIRD OBSERVING IN THE NORTH-EAST OF VICTORIA: by Mrs. E. Lyndon.

The week between Christmas and New Year we spent with the Bird Observers Club, near Whorouly in the Ovens Valley.

We left home a few days early and came by way of Yarra Glen to Yea, Mansfield, Tolmie and Whitfield, through cool green upland bush where massed Rock Isotome filled the gutters and smothered the road banks with blue like Bluebells.

(Cont'd over ...)

Birds in the North-east. (Cont'd)

Christmas dinner was enjoyed on the granite crag known as Power's Lookout, with distant views of many well known mountains from Buller, through Hotham to Feathertop and Painter right round to Mt. Buffalo just across the way.

The sundried valleys below were patchworked with green tobacco fields and everywhere we saw and heard the birds. Two Wedge-tailed Eagles soared and banked around us. We saw very little traffic on these gravelled roads and it wasn't until we descended to the new dam on the Buffalo River that we realised it was holiday time.

The streams in these north-eastern valleys are flanked by very fertile silt flats, bounded by bleached hills cut with severely eroded watercourses, now dry, miniature grand canyons lined with Red Gums. These provide nesting sites for Rainbow Birds and Pardalotes, and Fairy Martins stick their bottle nests to the roofs of the undercut banks. The Sacred Kingfisher also tunnels here, Blue Wrens and Red-browed Finches live there. Trees of the Red Box association dot the hillsides and the beautiful White-browed Wood Swallows were busy about these.

Our camp was set up in a grove of slender Red Gums on the wide and stony Ovens River, and its waters were our salvation during the two or three hot days that followed. Birdlife abounded, and over a hundred keen observers combed the district from dawn until dusk. Each evening they compared notes and soon over a hundred species were listed, 150 being the total by the weeks' end.

Many birds were strangers to us, among them the Dollar Birds and White-winged Trillers, Zebra and Diamond Firetail Finches. Excursions to other localities showed heavy mortality on the highways and undamaged specimens were often brought back for examination. Pretty little Red-backed Parrots feed along the road edges and do not rise until the cars are upon them. We picked one out from the grill of the unsuspecting owner's radiator in Wangaratta.

Around our camp area and across the river the irrigation sprays played on the tobacco and hop gardens all through the daylight hours, but rationing is practised on the rivers fall. Storm clouds bring little rain and the crops are poor and yellowish. But the water attracts the birds and provides their food also. Many flocks of Ibis ranged the district, Nankeen Night Herons and Boobook Owls sheltered in the Willows during daylight.

(Cont'd over ...)

Birds in the North-east. (Cont'd).

The first week of the New Year found us alone again, this time by the Woolshed Creek out of Beechworth. This area is the Mecca of gem hunters and their tic-tacing can be heard up and down the creekbed as they break the stones. Our spot was private, however, to us and a pair of Rainbow Birds that are feeding young in a tunnel near the road. Most maddening of birds to photograph they will sit for hours on a favourite high perch, holding food in their bills, determined to sit it out until we are gone. (Yes, they won!) How uncooperative they are compared to nesting Pardalotes, who are oblivious to all but the need to keep their children regularly fed. These trusting little fellows will come and sit on the camera.

The country is gravelly and drought-stricken and hundreds of gaunt rabbits canter about, to the detriment of the hardy flora. We are opposite the site of Woolshed village marked by a few burnt bedsteads and some orchard trees. The whole topography of the creek environs has been altered by the industry of those human rabbits of the gold rush days, who churned up the soil in the search for gold.

The pretty pale *Callistemon pallidus* lines the stream side, just past flowering, with Silver Wattle and a variety of massed green Eucalypts, Red and Long-leaf Box, Red Gum etc., some in blossom, support a multitude of birds and bees. We note that the Rainbow Birds catch the bees often and feed them to their young, thus justifying their other name of Bee Eater. Pardalotes are most plentiful, feeding busily amongst the leaves and calling their peculiar notes that sound to me like the creaking of fairy waggon wheels.

In the afternoon heat I sat quietly by a pool in the shade and watched ^{the birds} come and go. In the small ripples that link pool to pool they drink and play. The finest of all are the Yellow-tufted Honeyeaters, splendid in green and black and gold. With them come the Fuscous; the White-eared; the White-naped with their ruby eyes; the Brown-headed and the White-plumed that we know better as the Greenies.

What unimaginative names we have given to these lovely birds. Surely we could invent something apt and easy for each if we tried.

An observer has but to sit quietly and is soon accepted as part of the scene, save for inquisitive Pardalotes, this seasons' crop, who soon hang from the nearer twigs earnestly endeavouring to peer under ones hat brim. The Spotted Pardalote is the commonest one here. Rufous Whistlers make the forest ring with smaller songs from the Speckled and White-throated Warblers and a very occasional Thrush.

THE CABBAGE WHITE BUTTERFLY: by C.G.L. Gooding.

Notes on the spread and colonization of the Cabbage White Butterfly Pieris rapae from its homeland in Europe.

It is always at this time of the year in particular that our thoughts, and attention are given to the 'Cabbage White' Butterfly and as to how and when it reached Australia. We will begin with its spread westward from Europe.

It was about the year 1860 or a little earlier that it was first noted at Quebec in Canada, having arrived there presumably as larva or pupa in consignments of cabbages and cauliflowers, in ships trading from England and Europe to the New World. In the year 1863 the butterfly was already common around Quebec and the outlying districts, and was spreading rapidly wherever cabbages, cauliflowers and Brussel sprouts were grown.

By the year 1881 it had spread over most of the eastern half of the continent, reaching from Hudson Bay to southern Texas. It must be remembered that at that period Pieris rapae had left behind in Europe all its natural enemies and there was nothing to hinder or check its progress over vast areas of market gardening country of the eastern half of the United States of America.

By 1885 it had reached Denver, having earlier reached the headwaters of the Missouri River. A few years later it was in full possession of the cabbage and cauliflower fields from the Atlantic to the Pacific Oceans, and at that time causing damage amounting to thousands of dollars. It was during the early quarter of 1915 that it was reported to have reached New Zealand, probably in the same manner that it had arrived in Canada.

It was on November 27th. 1937 that I captured a female 'Cabbage White' Butterfly in the garden at my Stud Illawarra Short-horn Farm near Moe. This was the first official record of the capture of Pieris rapae in Australia. During the following months larva were taken from my cabbages and cauliflowers and reared to maturity. A few months later some Melbourne University students captured four specimens in the grounds of the University.

Drought conditions were prevailing in Victoria in 1937 and 1938 and large quantities of cabbages and cauliflowers were imported from New Zealand. It is presumed that larva and pupa of the Butterfly were attached to the leaves of the vegetables and so introduced into Australia.

(Cont'd over ...)

'White Cabbage' Butterfly. (Cont'd).

From these pupa a series of Cabbage White Butterflies were bred, the first ever raised from Australian stock. This series, along with the original specimen, are preserved in my private collection at Warragul.

Now, in November 1967, just 30 years after the capture of that first female 'Cabbage White' it is no uncommon sight to see clouds of white butterflies in the garden. This has prompted me to recall that lovely verse written by Jean Ingelow - and here it is: -

'Let me smell the wild white rose,
Smell the woodbine and the may;
Mark, upon a sunny day,
Sated from their blossoms rise,
Honey-bees and butterflies.

I trust that my readers will find these notes on Pieris rapae - its spread and colonization half way around the world - interesting.

----- C.G.L. (Llewellyn) Gooding -----
Warragul F.N. Club.

THE ABORIGINE AND NATURAL HISTORY: by David Frost.

Although we may be very enthusiastic about the subject and take advantage of every opportunity to increase our knowledge of natural history, we can hardly expect to be as well informed about nature as the aboriginal inhabitant of the Australian continent. Nature provided him and his family with food and shelter and all material needs, provided the inspiration for his culture and the basis of his well-regulated society. Almost every phase of his life and living was patterned upon what was learned from nature.

Let us first consider him and his way of life and see how necessary it was for him to be a professional field naturalist.

The origin of his race is lost in time - his presence cannot be any more satisfactorily explained than the existence of

(Cont'd over ...)

The Aborigine and Natural History. (Cont'd).

marsupials and other forms of life peculiar to this ancient land. We know that he has been here for at least 15,000 years and there is no evidence to show that there has been any major change in the way that he has lived during that time.

The aborigine believes that Australia has always been his home. His mythology - a surprisingly accurate and reliable story of the race - supports this view. He believes in immortality - an eternity of everlasting happiness - and places its locality among the heavenly bodies of which the elders of his people have a remarkable knowledge.

Each family group is a member of a tribe, and each individual member of a 'totem', the symbol of which would be an animal, reptile or bird. Each one would be required to have a perfect understanding of the creature of his totem, no part of which could be eaten or used in any way by those who were identified with it. In addition, a system of kin grouping provided a further link between members of the same kin and extended far beyond the country occupied by the individual tribes.

Most of the life of an aborigine was spent as a family group wandering in search of food and usually camping in a place which was well established on the itinerary. This was known as a 'sit-down' place and the aboriginal family would be at home until the endless search for food would impel it to move on.

As a nomad he would need to know the time of the changing seasons, where food and other necessary material was to be found; - nature provided for his his needs and so must be understood. So they knew the migrating paths of birds, the breeding grounds and feeding places - where grew the trees and plants that helped to sustain them and the animals they hunted as a source of protein. During the breeding season animals and birds would enjoy a measure of protection - this was not compassion but simply commonsense - if the food was not permitted to regenerate then the supply would diminish.

All this knowledge was as much a part of the aboriginal heritage as was his tribal land - it would be passed from one generation to the next and each stage of initiation would ensure that he was fully informed and conversant with all that he was expected to know before that stage could be completed and the initiate prepared for further advancement.

The Aborigine and Natural History. (Cont'd)...

At certain times of the year when a flower bloomed, birds nested or some other natural phenomena was observed, and the family group knew that it was time to assemble for such tribal affairs as initiation and discussion by elders of the tribe on matters of sufficient importance to justify such a gathering. This explains why, at certain times, whatever his position or responsibilities, the aborigine will feel the urge to journey to a place set aside and known only to his tribe, to meet with his people, as they have done for centuries. Obeying this law with the same diligence as he does all the laws of his people and of nature, he enjoys a spiritual refreshment and a binding of the ties that he can never completely free himself from.

Here we have a people who have adjusted themselves to their environment - learned to live upon the natural resources of the country - without exploitation or destruction of the material which sustains them. Placed by the Creator in perfect harmony with nature, in his allotted dwelling and destiny, the creature is seen procuring his needs, regulating his affairs of a social nature, and securing all the happiness of which his condition is capable.

As man seeks change when he is not content or when his needs are inadequately met, we must assume that the aboriginal was completely satisfied with his way of life for it to continue unchanged for such a long period of time. Was this because he lived with nature? - which, serene and tranquil in its bountiful provision of, for him, happiness and fulfilment has, because of our way of life, prevented us from attaining the same state.

----- D. Frost -----
Warragul F.N. Club,

Latrobe Valley Naturalist.

WARRAGUL FIELD NATURALISTS CLUB.

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- VICE-PRESIDENTS: Mr. Clive Fisher, Old Bona Vista Road, WARRAGUL.
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SECRETARY.

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Hon. Secretary: Mr. S. Bolgraver, 179. Lloyd Street, Moe.

General Meetings.

Are held at the Yallourn State School on the 4th. Friday of each month, commencing at 7.30 p.m. A programme of proceedings may be obtained from the Secretary.

Excursions.

These are in the nature of field days under competent leaders and are held, usually, on the Saturday following the general meeting.
Visitors are welcome to both meetings and excursions.

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The responsibility for matter printed in the 'Naturalist' is generally with the contributors. Every reasonable efforts are made to ensure the accuracy of the matter printed herein.

Contributions are invited from members, and others, on any aspect of Natural history which could be considered of interest to the members of the Club. They should be addressed to:

G.T. Scanlan,
c/o L.V.C. Hospital,
YALLOURN. VICT. 3838.

ISSUE No. 50.

FEBRUARY, 1968



protect and enjoy

LATROBE VALLEY NATURALIST

REGISTERED AT THE GENERAL POST
OFFICE MELBOURNE FOR TRANSMISSION
BY POST AS A PERIODICAL.

10c

LATROBE VALLEY FIELD NATURALISTS CLUB.

YALLOURN. VICTORIA.

Dear Fellow Field Naturalists,

General Meeting Friday 23rd. February 1968: This is to take the form of a talk entitled 'Wildflowers' by Miss Jean Galbraith, author, among other works of 'Wildflowers of Victoria', a revised edition is now available at booksellers.

Excursion Saturday 24th. February: It is understood that the February excursion will be announced at the General meeting.

Report of the meeting of the Executive Committee on Monday 5th. February 1968. at the home of Miss Galbraith:

Markers: It was decided to recommend to the Landscape Preservation Council of the National Trust of Victoria, that a uniform marker using a conventionalised grass-tree as a motif, be adopted to denote areas which have been or are recommended for preservation .

Natural History Classes: Arrangements have now been made for the commencement of Natural History classes at the Yallourn State School, probably towards the end of March. This has been confirmed in correspondence between the Director of Classes (Mr. Fox) of the Council of Adult Education for Victoria, and the Secretary, L.V.F.N.Club.

There is to be an introductory series of eight classes, for which those attending will pay a total of \$3 each. It is expected that advanced classes will then follow... Salaries of the qualified tutors will be paid by the C.A.E..

Members wishing to participate are asked to complete the form at the back of the 'Naturalist' indicating the most suitable night in each week for them to attend.

Boola Boola Reserve: A public Meeting is to be called for the purpose of appointing a Committee of Management of three to control the Boola Boola Reserve, and the Executive recommended the following members;-

Messrs. E. Homann, F.E. Jones and T. Morotti.

The time and place of the meeting will be advertised in the 'Latrobe Valley Express'.

(Cont'd over ...)

Survey of the Darlamurla Area: Mrs. Frankenberg, Secretary of the Mammal Survey Group of the Field Naturalists Club of Victoria, has advised that she is preparing a report, following a mammal survey of this area, and that the report is expected to be published in the 'Victorian Naturalist' during the next few months. The bird and botanical lists prepared by Mr. Frank Jones and Mrs. Ellen Lyndon respectively are to be sent to Mrs. Frankenberg for incorporation in the report. Negotiations for the creation of a reserve at Darlamurla are proceeding.

Next Meeting of the Executive: This will be held at the home of Miss Nancy Rossiter at Railway Avenue, Yallourn, at 7.30 p.m. on Monday 4th. March.

Annual General Meeting: Nominations for election to the offices of Vice-President and Honorary Secretary, which become vacant through effluxion of time, should be sent to the Secretary on the form provided in this issue, before the time of starting the Annual General Meeting.

Wulgulmerang Camp-out: Because of a lack of time and space, it has been possible to publish part only of the botanical list of species seen and identified at the Australia Day long weekend campout. The balance will be included in the March issue, together with a list of birds identified by Mr. F.E. Jones.

This excursion was well attended and most successful. It was attended by representatives of at least five clubs, and apart from the field successes, was a valuable 'get-together' of enthusiasts from over a wide area of Victoria.

Those of us who attended are grateful to Mr. Keith Rogers, host on his Rockbank Station, and very effective organiser and leader, who introduced some of us to the natural wonders of his district, including the Pleistocene block streams ('rock rivers') of Mt. Wombargo, composed of rocks of rhyodacite, and described quite recently by Dr. J.A. Talent.

Traralgon Field Naturalists Club doings: The Honorary Secretary of the Traralgon Club advises the following as events to come:-

March General Meeting.	Friday 15th. March.	"Some Aspects of Geology".
March Excursion.	Sunday 17th. March.	Usual Place of Meeting.

At the April Meeting Mrs. Ellen Lyndon will provide a talk on Ferns, and the excursion will be to the Morwell National Park.

Mr. Stan Butler is expected to address the May meeting on the subject of Eucalypts.

G.T. Scanlan.
Honorary Editor.

OBSERVATIONS ON THE POLLINATION OF TONGUE ORCHIDS:by

Mrs. Bon Thompson.

One morning - early - we noticed the ichneumon-fly on the small Tongue Orchid (*Cryptostylis leptochila*) flowering in our garden. It is a very colorful insect with black abdomen, white spots down each side and a dark maroon tail. The wings are transparent, the reddish antennae are longer than the insect and very active. The head and thorax are dark but the legs are an orange-red color, giving the insect a bright color underneath. We have seen the insect resting on the leaves of pear trees. As Ollie wished to photograph the Orchid and the fly, we put a plastic bag over the orchid the night before and did not remove it until ready to photograph about 9.30 a.m.. Within a few minutes of removing the bag there were two insects around the flower. These were photographed.

We then obtained permission to remove a plant of the large Tongue Orchid (*Cryptostylis subulata*) from a private property nearby and brought it home. We were interested to see if the same insect would visit both of these orchids. We put plastic bags on both orchids and did not remove them until 10.30 a.m., but only one fly visited each of the two flowers, and was very wary. We repeated the experiment again the next morning but removed the bags at 9.15 a.m.. This time we were rewarded as within three minutes of removing the bags we had eight flies on the large Tongue Orchid flower, and others on the small Tongue Orchid flower. They were all over the tongue and most of them waited to insert their tails into the centre of the flower. While in this position the antennae were extremely active and the insect stiffened into an arch. The flies varied in body length from $1\frac{1}{3}$ " to $\frac{3}{4}$ " long, but we could not see any other difference in them.

Within 15 minutes all the flies had gone and we did not notice them there again that day. However, we have noticed one or two visiting the flowers in the early morning. Does the insect only become active in the early part of the day and rest during the heat or does the flower only emit the attracting scent in the earlier part of the day? Not one of us has observed a fly on the flowers later than about 10.15 a.m. unless the plastic bags have been used. Yet the flowers are in the sun until after midday, and are not in the sun in the early morning when we have often seen them visited. Each time the plastic bags were used the insects came upwind and the weather on both days was very similar.

----- Bon Thompson -----

THE WULGULMERANG WEEK-END:

by Miss N.T. Rossiter.

On the week-end during which the Club members visited Rockbank Station at Wulgulmerang, the recorder of botanical species was kept busy making lists of plants identified by Miss Jean Galbraith and Mr. Keith Rogers.

Over 220 species were named, excluding orchids and ferns, which were listed separately, and excluding also grasses and most other families of plants more lowly than the lily.

About half of the species listed were flowering, and of these half belonged to the daisy family (Compositae). Of those flowering the predominating species were: - the delightful Baeckea utilis (once gunniana), the Mountain Heath Myrtle with its small white 'teatree' flowers, pink tinted buds and small fragrant leaves, Leptospermum grandifolium with large white blossoms and attractive brownish-red growing tips, the yellow Callistemon sieberi, and the white Epicras paludosa, swamp heath at the higher altitudes of Mt. Wombargo (5,200'), several varieties of blue bells including the charming little Wahlenbergia gracilentia, and the larger, deeper coloured W. vinciflora, the gay yellow senecios. On the road to Bald Hills, Helichrysum bracteatum, golden everlasting, the branched stems of which carry big, bright golden flowers, and Cassinia longifolia, shining cassinia, with large creamy flower heads and dark green foliage.

Smaller plants of special charm were: - the dwarf pink-flowered brooklime, Gratiola peruviana var. pumila, the swamp isotope, I. fluviatilis, a creeping plant with white or pale purple flowers, the purple violet, V. betonicifolia, the flowers of which seemed bigger than the cultivated violet, ranunculus milani, a tiny bog plant with greenish-white flowers, and perhaps the most decorative of all, the lovely aquatic plant, Nymphoides crenatum, wavy marsh flower, growing in Little River, its yellow flowers 1" across with 3 - 7 fringed petals and a fringed crown around the stamens and its large, handsome nasturtium-like leaves green above and reddish beneath.

At least seventeen different species of eucalypts were recorded and it may be of interest to note the characteristics of some of them: - Growing along Little River we saw E. Camphora, sallow-box, a smallish tree with a dark rough trunk and smooth darkish grey branches, broad egg-shaped leaves, often indented, 4 - 7 pointed buds in the umbel and small fruit with 3 or 4 valves slightly projecting. E. stellulata, black sallee, so named because of the star-like clusters of the numerous crowded buds. It is smooth-barked but more or less rough barked towards the butt. The leaves have the same type of longitudinal veins as E. pauciflora or snow gum, but this gum also smoothbarked has no rough butt, and the buds are less crowded with blunter points, and in this area the snow gum is often distinguished by 'scribbles' on the trunk.

(Wulgulmerang Cont'd. ...)

E. mannifera, white brittle gum, another smooth barked tree with a lovely white trunk, patterned with grey, the bark powdery when rubbed. E. viminalis, E. rubida, and E. dalrympliana are three eucalypts growing in this area which are virtually indistinguishable from each other except for the juvenile leaves. All usually have three buds arranged with the peduncle in the form of a cross. Their fruits and adult leaves are also similar, variations within the species overlapping differences between them. However, E. viminalis (manna gum) has narrow lance-shaped leaves (juvenile) while E. rubida (candle-bark) and E. dalrympliana both have broad, roundish ones, and between the latter two the only safe distinction is their colour, rubida being bluish grey and dalrympliana a yellowish green.

Going north to the N.S.W. border the predominating species of Eucalypt seen was E. albens, white box. This is relatively easy to identify with its heavy bluish-grey leaves and large buds and fruit, the buds being covered with a whitish bloom. Other Eucalypts seen in this area were the long leaf, apple and yellow-boxes, red stringybark, common peppermint and blue-leafed peppermint. Nearer the N.S.W. border the road passes through a native pine forest, Callitris eulamellaris, Murray Pine being the predominating species.

Several uncommon plants require special mention: - Acacia siculiformis is found only in this area in Victoria. It is common on the Rockbank property - not a very attractive shrub with rather sparse sharp-pointed phyllodes about an inch in length. A. kybeanensis is also restricted to this area. Banksia canei, a patch of which was inspected by the party on the way to Wombargo, was discovered by Mr. Bill Cane of Maffra about five years ago. It has only just been described as a new species in the last issue of the Melbourne Herbarium 'Muelleri'.

A dwarf Trigger plant found by the party on Rocky Plains on the Sunday appears to be Stylidium lineare, a new record for Victoria.

On the homeward journey from Wombargo we were taken by Mr. Keith Rogers to see a few plants of the rare Thesium australis or austral toad flax. This rather undistinguished little plant has tiny white flowers and narrow yellowish leaves, but it treasured because of its rarity.

A list of the species of plants recorded is given on the following pages. This is not a complete list and there are many omissions, but it may give some idea of the range and profusion of plants in this area of far north-eastern Gippsland.

(Wulgulmerang - 27/1/68 to 29/1/68.)

List of Botanical Species Recorded in Wulgulmerang Area:
excluding all families before Liliaceae except Podocarpaceae and Cupressaceae.

Podocarpus lawrencei.

Mountain Plum Pine.

Cupressaceae.

Callitris columellaris.

Murray Pine.

C. endlicheri.

Black Pine.

Liliaceae.

Lomandra longifolia.

Tall mat-rush.

Dianella laevis.

Pale flax-lily.

" tasmanica.

Tasman flax-lily.

Bulbine bulbosa.

Bulbine lily.

Anthropodium minus.

Pale Vanilla lily.

Amaryllidaceae.

Hypoxis hygrometrica.

Golden weather glass.

Orchidaceae. (See separate report).

Casuarinaceae.

Casuarina stricta.

Drooping Sheoke.

PROTEACEAE.

Persoonia confertiflora.

Clustered Geobung.

Banksia canei.

" marginata.

Silver Banksia.

" chamaepeuce.

Dwarf Banksia.

Lomatia longifolia.

Long leaf lomatia.

Hakea microcarpa.

Small fruit hakea.

Grevillea lanigera.

Woolly Grevillea.

Santalaceae.

Exocarpus stricta.

Pale-fruit Ballart.

" nanus.

Alpine Ballart.

" cupressiformis.

Cherry Ballart.

Thesium australe.

Austral toad-flax.

Choretrum lateriflorum.

Dwarf sour-bush.

Loranthaceae.

Amyema pendula.

Drooping Mistletoe.

Polygonaceae.

Rumex brownii.

Native Dock.

Polygonum lapathifolium.

Pale knotweed.

(Cont'd over ...)

(Wulgulmerang - Botanical List - Cont'd ...)

Amarantaceae.

Alternanthera denticulata.

Joyweed.

Portulacaceae.

Portulaca oleracea.

Common Purslane.

Caryophyllaceae.

Stellaria pungens.

Prickly Starwort.

" *flaccida.*

Forest Starwort.

Scleranthus biflorus.

Twin-flowered knawel.

" *diander.*

Tufted "

Ranunculaceae.

Clematis aristata.

Clematis.

" *microphylla.*

Small-leaved clematis.

Ranunculus plebeus.

Hairy Buttercup.

" *lappaceus.*

Common Buttercup.

" *aquatilis.*

Water Buttercup.

" *rivularis.*

River Buttercup.

" *Millari.*

Swamp Buttercup.

" *pimpinellifolius.*

Bog Buttercup.

Magnoliaceae.

Drimys lanceolata.

Mountain Pepper.

" *Xerophylla.*

Alpine Pepper.

Cruciferae.

Rorippa dictysperma.

Forest Bitter-cross.

Droseraceae.

Drosera peltata.

Pale Sundew.

Crassulaceae.

Crassula holmsii.

Swamp Stonecrop.

" *sieberiana.*

Austral Stonecrop.

Pittosporaceae.

Pittosporum bicolor.

Banyalla.

Rosaceae.

Acaena anserinifolia.

Bidgee-widgee (burr).

Rubus triphyllus.

Wild Raspberry.

Mimosaceae.

Acacia sicutiformis.

" *falciformis.*

Hickory Wattle.

" *parvissima.*

Ovens Wattle.

" *kybeanensis.*

" *dealbata.*

Sliver Wattle.

(Wulgulmerang - Botanical List - Cont'd. ...)

Mimosaceae. (Cont'd)

<i>Acacia verniciflua.</i>	Varnish Wattle.
" <i>pycnantha.</i>	Golden Wattle.
" <i>amoena.</i>	Boomerang Wattle.
" <i>boorimani.</i>	Snowy River Wattle.
" <i>melanoxydon.</i>	Blackwood.
" <i>paucijugga.</i>	----
" <i>rubida.</i>	Red-stem acacia.

Papilionaceae.

<i>Mirbelia oxylloboides.</i>	Mountain mirbelia.
<i>Oxyllobium alpestre.</i>	Mountain Saggy-pea.
<i>Daviesia latifolia.</i>	Hop Butter-pea.
" <i>ulicifolia.</i>	Gorse Bitter-pea.
<i>Pultenaea juniperina.</i>	Prickly Bush-pea.
<i>Dillwynia prostrata.</i>	----
<i>Desmodium varians.</i>	Slender tic-trefoil.
<i>Lotus australia.</i>	Austral trefoil.
" <i>corniculatus.</i>	Bird's-foot Trefoil.
<i>Platylobium formosum.</i>	Handsome flat-pea.
<i>Bossia foliosa.</i>	Leafy bossiaea.
" <i>buxifolia.</i>	----
<i>Hovea heterophylla.</i>	Common hovea.
<i>Indigofera australia.</i>	Indigo.
<i>Psoralea adscendens.</i>	----
<i>Glycine clandestina.</i>	Twining glycine.
<i>Hardenbergia violacea.</i>	Purple Coral-pea.

Geraniaceae.

<i>Geranium potentilloides.</i>

Linaceae.

<i>Linum marginale.</i>	Wild flax.
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Rutaceae.

<i>Phebalium lamprophyllum.</i>	Shining phebalium.
<i>Boronia nana.</i>	Waxy boronia.

Polygalaceae.

<i>Comesperma retusum.</i>	Mountain milk-wort.
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Euphorbiaceae.

<i>Adriana glabrata.</i>	Woolly Bitter-bush.
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Stackhousiaceae.

<i>Stackhousia monogyna.</i>	Creamy stackhousia.
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Sapindaceae.

<i>Dodonaea angustissima.</i>	Slender hop-bush.
" <i>cuneata.</i>	Giant hop-bush.

Wulgulmerang - Botanical List Cont'd ...

Rhamnaceae.

Discaria pubescens.	Austral Anchor-plant.
Pomaderris aspera.	Hazel pomaderris.
" sp.	----
" phyllifolia.	Narrow-leaf pomaderris.

Elaeocarpaceae.

Elaeocarpus diversifolia-holopetalus.	Currajong. Black olive- berry.
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Sterculiaceae.

Sterculia diversifolia.	Currajong.
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Dilleniaceae.

Hibbertia linearis var. obtusata.	Showy Guinea-flower.
" pendunculata.	Stalked Guinea-flower.
" sorpyllofolia.	Thyme-leaf Guinea-flower.

Eucryphiaceae.

Hypericum japonica.	Matted St. John's Wort.
" gramineum.	Small St. John's Wort.

Violaceae.

Viola hederacea.	Ivy-leaf Violet.
" betonicifolia.	Purple Violet.
Hymenanthera dentata.	Tree Violet.

Thymelaeaceae.

Pimelea axiflora.	Bootlace plant.
" ligustrina.	Tall rice-flower.
" glauca.	Smooth rice-flower.

Myrtaceae.

Eucalyptus camphora.	Sallow box.
" stellulata.	Black sallee.
" pauciflora.	Snow gum.
" mannifera.	White brittle-gum.
" ovata.	Swamp Gum.
" dives.	Blue peppermint.
" radiata.	Common peppermint.
" viminalis.	Manna gum.
" dalrympliana.	Mountain gum.
" delegatensis.	Woolly butt.
" geniocalyx.	Long leaf box.
" macrorrhyncha.	Red stringybark.
" albans.	White box.
" melliodora.	Yellow box.
" bridgesiana.	Apple box.
" cephalcarpa.	Silver-leaf stringybark.
" obliqua.	Messmate.

Latrobe Valley Field Naturalists Club.

Nomination Form.

I _____ a financial member of the Club hereby
nominate _____ for the office of _____
_____ and I _____
the person nominated agree to carry out the duties of the position
if elected thereto.

Signature of Proposer. _____

Signature of Secunder. _____

Signature of person nominated _____

Latrobe Valley Field Naturalists Club.

Classes in Natural History.

I am interested in attending the forthcoming classes in
Natural History to be held at the Yallourn State School, and
would regard the following nights, in order of preference, to be
suitable for me to attend.

- | | |
|----------|----------|
| 1. _____ | 2. _____ |
| 3. _____ | 4. _____ |
| 5. _____ | |

(Signed) _____

Address _____

Latrobe Valley Naturalist.

WARRAGUL FIELD NATURALISTS CLUB.

- PRESIDENT: Mr. Jack Brooks, Box 120, WARRAGUL.
- VICE-PRESIDENTS: Mr. Clive Fisher, Old Bona Vista Road, WARRAGUL.
- SECRETARY: Mr. Don Steele, Edinburgh Street, WARRAGUL.
- TREASURER: Mrs. Betty Steele, Edinburgh Street, WARRAGUL.
- COMMITTEE: All the above with: -
Mr. Dick Briggs, 59 Brandy Creek Road, WARRAGUL.
Mr. Les Anderson, King Street, WARRAGUL.
- MEETINGS: General Meetings of members are hold on the third Friday of each month in the Warragul State School (Albert Street). Meetings commence at 8 p.m. and members are invited to bring items of interest to share with those present. Friends and visitors are assured of a warm welcome.
- EXCURSIONS: Excursions are arranged wherever possible and, as a general rule, are two weeks after the General Meeting. As will be read elsewhere members and visitors are invited to join the excursions of the other Clubs in the area.
- SUBSCRIPTIONS: Annual subscriptions, which become due at the end of February in each year are as follows:-
- | | |
|---------|-------------------------|
| Family. | \$1.50 |
| Single. | \$1.00 |
| Junior. | 50c (attending school). |
- The 'Latrobe Valley Naturalist'. Financial members of the Club will receive a copy of this periodical, and it will be appreciated if members will support our sister Club by submitting contributions wherever possible.

Don Steele.

SECRETARY.

Latrobe Valley Naturalist.

TRARALGON FIELD NATURALISTS CLUB.

TRARALGON. VICT.

OFFICE-BEARERS:

PRESIDENT: Mr. Geoff. Proudfoot, 25 Dunbar Road, Traralgon.
VICE-PRESIDENT: Mr. G. Valentine, 36 Chenhall Crescent, Traralgon.
SECRETARY/TREASURER: Dr. D.W. Collins, 4 Charles Street, Traralgon.
EXCURSION LEADER & PUBLICITY OFFICER: Mr. G. Marshall, Elliott Street, Traralgon.
EXECUTIVE COMMITTEE: The above (temporarily).

MEETINGS:

General Meetings are held at the Grey Street State School on the second Friday in each month at 7.30 p.m..

EXCURSIONS:

For the first few months the excursions will be visits to local areas of interest, and will cater especially for members who are new to field naturalist work.

Excursions are held on the Sunday following each monthly meeting.

SUBSCRIPTIONS:

\$1.00	Single Membership.
\$1.50	Family Membership.
.25c	Junior Membership.

The Latrobe Valley Naturalist will be posted to financial members of the Club;- for the first year of the Club members requiring 'The Naturalist' will be required to pay 50c in addition to the above.

D.W. Collins.

LATROBE VALLEY FIELD NATURALISTS

CLUB.

Yallourn,
VICTORIA.

Office-Bearers 1967 - 1968.

President: Mr. E. Homann, 84 Hennessey St., Moe.
Vice-Presidents: Messrs. J. Peterson, F.E. Jones and G.T. Scanlan.
Treasurer: Mr. E. McElroy, 35 Latrobe Street, Morwell.
Excursion Secretary: Miss N. Rossiter, Railway Avenue, Yallourn.
Publicity Officer: Mrs. Bon Thompson, Traralgon South.
Hon. Editor: Mr. G.T. Scanlan, L.V.C. Hospital, Yallourn.

Hon. Secretary: Mr. S. Belgraver, 179. Lloyd Street, Moe.

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G.T. Scanlan,
c/o L.V.C. Hospital,
YALLOURN. VICT. 3838.

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LATROBE VALLEY FIELD NATURALISTS CLUB.

YALLOURN. VICTORIA.

Dear Fellow Field Naturalists,

Members are reminded in the notes by the Secretary (Mr. S. Belgraver) which follow, that the March meeting of members takes the form of the Photoflora '68 exhibition of coloured slides at the Morwell Town Hall.

Report of the Executive meeting held on 4th. March 1968: by the Hon. Secretary.

The general meeting to be held on Friday March 22nd, will be the screening of Photoflora '68 at the Morwell Town Hall, starting at 8 p.m. Some 150 award winning and accepted colour slides of wildflowers and native plants from Victoria and other States will be shown with a commentary. Tickets may be bought from members of the L.V.F.N.C., the Traralgon F.N.C., and the Warragul F.N.C.. They are also being sold by local Camera Clubs.

Members are requested to return unsold tickets by mail to the Secretary not later than Monday 18th. March, as these will need to be used at the ticket box at the Town Hall on the night of the showing. Please do not send money - this will be collected at the next meeting - the annual meeting.

Annual Meeting: The annual meeting will be held on Friday March 29th. at the Yallourn State School, at which the President will present the Annual Report, the Treasurer the Financial Report, and Miss Kemp will inform members of the Carsticker project.

Through effluxion of time the positions of two Vice-presidents and Secretary become vacant, and nominations for those positions should be in the hands of the Secretary not later than the Friday preceding, March 22nd. Nominations, which must be in writing, should preferably be made on the prescribed form, which is available from the Secretary.

After the conclusion of the business of the Annual Meeting bird slides will be shown together with, it is hoped, a taped recording of the songs of the birds.

Annual Subscriptions: As the annual subscriptions are now due, members are urgently requested to pay them at the first opportunity, as postal regulations require that the Naturalist may be sent only to financial members of the Club.

(Cont'd over

(Executive Meeting Notes Cont'd).

March Excursion: On Sunday March 31st. the excursion will be to Sale to study the water birds. After assembling at 1030 a.m. at Lake Guthridge, we will look for birds in the vicinity of and on the lake, while after lunch the party will visit the Sale Common. Mr. Frank Jones will lead the excursion.

Natural History Classes: It was decided at the last general meeting to conduct the classes in natural history on Friday evenings, as apparently the most convenient meeting night for members who intended to attend. The first lecture will be on Friday 19th. April, and on each Friday thereafter, except on the Friday of the L.V.F.N.C. general meeting nights. That means that there will not be a lecture in the series of classes on the fourth Friday of each month. Further details may be obtained from the Hon. Secretary.

Hazelwood Arboretum: The Hazelwood Arboretum Sub-committee, consisting of members of the Morwell Horticultural Society, and of the L.V.F.N.C., met at the home of Mr. R.N. Auchterlonie to consider the future work and planning for the Arboretum. It was decided to plant more trees, north of the road through the arboretum, during the autumn period, if sufficient rain falls to enable further planting to be made.

Preservation of Areas: Four lists of areas which it is considered should be safeguarded against destruction of the plants and wildflowers which they contain, have been received. Copies will be sent to appropriate authorities. A suggestion was made that a survey should be conducted along the Mountain Hut Road of wildflower areas which are considered worthy of preservation, and Mr. Tom Morretti has been requested to discuss the matter with the Club.

----- S. Belgraver -----
(Honorary Secty)

Nomenclature and the Wulgulmerang List of Botanical Species: Miss Jean Galbraith has pointed out some typographical and other errors which have crept into the list, the first part of it appearing in the February issue. These are perhaps not as greatly important as the failure by the Editor to apply the International Rules for Botanical Nomenclature which require that "the initial letter of the generic name should be a capital, while the initial letter of the specific name should be written as a small letter."

The usual convention for writing common names is that the initial letter of each word should be capital except the second part of a hyphenated word."

-----G.T.S.-----
Ed.

A NOTE ON KELP FLIES: by Mrs. Ellen Lyndon.

On our way home from the East Gippsland weekend with the Club we called in to have a look at Red Bluff on the coast a few miles east of Lakes Entrance.

Since reading Mr. Scanlan's description of the place, (Newsletter April 1966), it has been on my list of localities worth visiting when in that area. And very interesting it proved, so much so that I hope to go again when opportunity offers, and spend much more time there - preferably in cooler weather. Fire had spoiled all the Beach Teatree. The beach itself was clean and beautiful and there were some pretty shells and sponges still flushed with colour lying along the tidemark. Among the pile of rocks at the foot of the Bluff were some that were rich in marine fossils, probably of the Kalimnan series that are found at nearby Jemmy's Point. The real purpose of this note, however, is to record the swarming of certain flies in a cave-like recess in the sandstone at beach level.

The roof of this cave, which is situated at the point of the Bluff behind the rockfall, was one shimmering expanse of insects not unlike small house flies, not actually swarming like bees but packed side by side in an unbroken sheet. They rose in millions when disturbed. A sample was collected and forwarded to the National Museum for identification. The Curator of Insects, Mr. Neboiss, reports that they are Kelp Flies belonging to the genus Coolopa, of the family Phycodromidae.

The Kelp Flies breed in beach washed kelp (seaweed) and after emerging from pupae take shelter in coastal caves and rock crevices. Mr. Scanlan, in his article, mentions the quantity of kelp on the beach at the time of his visit. The larvae of these flies are most likely a provision of nature to deal with the huge smelly banks of rotten seaweed that decorate so many of our beaches at this time of the year. I wish that I knew more about them. It is not enough to merely know the identity of the things we are observing - actually, it is only a beginning.

----- Ellen Lyndon -----

(Wulgulmerang - 27/1/68 to 29/1/68)

List of Botanical Species Recorded (2).Myrtaceae.

Leptospermum grandifolium.

" ericoides.

" myrtifolium.

" juniperinum.

Callistemon sieberi.

" pallidus.

Baeckea utilis.

-

Burgan.

Myrtle Tea-tree.

Manuka.

Alpine Bottle-brush.

Lemon Bottle-brush.

Mountain Baeckea.

Onagraceae.

Epilobium junceum.

" pallidiflorum.

Hairy Willow-herb.

Shy Willow-herb.

Haloragidaceae.

Haloragis tetragyna.

" tucrinoides.

Poverty Raspwort.

Germanda Raspwort.

Araliaceae.

Tieghemopanax sambucifolius.

Elderberry Panax.

Umbelliferae.

Hydrocotyle pendunculata.

Oreomyrrhis vulgaris. sp.

" eriopoda.

Aciphylla simplicifolia.

Trachymene humilis.

Oschartzia cuneifolia.

Seseli harveyanum.

Common Pennywort.

Cushion Carraway.

Carraway.

Alpine Achyll.

Alpine Didiscus.

Wedge-leaf Azorella.

Alpine Sesely.

Epacridaceae.

Lissanthe strigosa.

Epacris microphylla.

" serpyllifolia.

" paludosa.

" breviflora.

Acrotriche prostrata.

" aerrukata.

Leucopogon pilibundis.

" gelidus.

Brachyloma daphnoides.

Peach Heath.

Coral Heath.

Thyme Heath.

Swamp Heath.

Short-flowered Heath.

Trailing Ground

Honey-pots.

Beard Heath sp.

" " sp.

Daphne Heath.

(Cont'd over ...)

(Wulgulmerang Botanical List Cont'd).

Oleaceae.

Notelaea holopetalons.

Mock Olive.

Gentianaceae.

Gentianella diemensis.

Mountain Gentian.

Erythraea centaurian.

Common Gentian.

Nymphoides crenatum.

Wavy Marsh-flower.

Verbenaceae.

Verbena officinalis.

Common Verbena.

Labiatae.

Ajuga australis.

Bugle.

Prostanthera phyllicifolia.

Spike Mint-bush.

" lasianthos.

Christmas Bush.

Prunella vulgaris.

Self-heal.

Scrophulariaceae.

Gratiola peruviana.

Brooklime.

" " var. pumila.

Veronica perfoliata.

Diggers Speedwell.

" derwentia.

Derwent Speedwell.

" gracilis.

Slender Speedwell.

Lentibulariaceae.

Utricularia dichotoma.

Fairies Aprons.

Rubiaceae.

Coprosma hirtella.

Rough Coprosma.

Asperula minima.

Moss Woodruff.

" gunnii.

Mountain Woodruff.

Caprifoliaceae.

Sambucus gaudichaudiana.

White Elderberry.

Campanulaceae.

Wahlenbergia bicolor.

Bluebell sp.

" consimilis.

" sp.

" gracilentia.

Lobeliaceae.

Lobelia alata.

Angled Lobelia.

" gibbosa.

Tall Lobelia.

Pratiapendunculata.

Trailing Pratiapendunculata.

(Wulgulmerang Botanical List Cont'd).

Goodeniaceae.

(6)

Goodenia hederacea var *alpina*.

" *lanata*.

Velleia montana.

Ivy *Goodenia*.

Trailing *Goodenia*.

Mountain *Velleia*.

Stylidiaceae.

Stylidium graminifolium.

" *liniere*.

Grass Trigger-plant.

Dwarf Trigger-plant.

Compositae.

Lagenophora huegelii.

" *stipitata*.

Brachycome scapigera.

" *stricta*.

" *graminea*.

" *cardiocarpa* var. *alpina*.

" *rigidula*.

Coarse Bottle-daisy.

Blue Bottle-daisy.

Tufted Daisy.

Erect Daisy.

Grass Daisy.

Swamp Daisy.

-

Olearia erubescens.

" *myrsinoides*.

" *lirata*.

" *alpicola*.

" *phlogopappa*.

" *argophylla*.

" *glandulosa*.

Blush Daisy-bush.

Silky Daisy-bush.

Snow Daisy-bush.

Alpine Daisy-bush.

-

Musk Daisy-bush.

Swamp Daisy-bush.

Gnaphalium luteo-album.

" *umbricola*.

Jersey Cudweed.

-

Helichrysum rutidolepis.

" *semipapposum*.

" *thyrsoideum*.

" *bracteatum*.

" *cuneifolium*.

" *acuminatum*.

" *rosmarinifolium*.

" *leucopsidium*.

" *obcordatum*.

Pale Everlasting.

Clustered Everlasting.

Cascade Everlasting.

Golden Everlasting.

-

Alpine Everlasting.

Rosemary Everlasting.

Satin Everlasting.

Grey Everlasting.

Craspedia uniflora.

Billy Button.

Cotula reptans.

Alpine *Cotula*.

Senecio lautus.

Variable Groundsel.

" *quadridentatus*.

" *preanthoides*.

" *linearifolius*.

" *velleoides*.

Fireweed Groundsel.

Forest Groundsel.

(Wulgulmerang Botanical List Cont'd).

Bedfordia salicina.	Blanket leaf.
Cymbonotus lawsonianus.	Austral Beardear.
Podolepis longipedata.	Long Podolepis.
" robusta.	-
Leptorhynchus squamatus.	Scaly Button.
Microseris lanceolata.	Yam.
Celmisia longifolia.	Silver Daisy.
Centipeda cunninghamii.	Common Sneezeweed.

Fern List for the Wulgulmerang Area.

Pteridophyta. Ferns and Fernlike Plants:

Dicksonia antarctica.	Soft Treefern.
Cyathea australia.	Rough Treefern.
Blechnum procerum.	Hard Water-fern.
" nudum.	Fishbone Water-fern.
" minus.	Soft Water-fern.
" fluviatile.	Ray Water-fern.
" penna-marina.	Alpine Water-fern.
Adiantum aethiopicum.	Common Maidenhair.
Asplenium flabollifolium.	Mocklace Fern.
Pteris tremula.	Tender Brake.
Pteridium esculentum.	Common Bracken.
Polystichum proliferum.	Mother Shield-fern.
Isoetes humilior.	Rock Quillwort. In rock crevices in Little River below homestead.

Fungi of the Wombargo Area: by Mrs. Ellen Lyndon.

This is not the season to expect much in the way of Fungi but half a dozen kinds were seen during the weekend's touring at Wombargo. Hygrophorus miniatus was unexpected; an inhabitant of wet and mossy places it is a brilliantly red gilled toadstool, quite tiny. Strobilomyces amanicaps is a larger and a plainer one, but unusual for its pored or tubed undersurface and very rough cracked pattern skin on the cap. We had this one determined at the National Herbarium some years ago after collecting it at Darlimurla. It had something in common with the huge pinkish Boletus species that we picked up along the river near the camp.

(Fungi - Wombargo Area Cont'd).

In a damp spot passed on our walk up the mountain there were colonies of snowy white puffballs. These are members of the Gasteromycetae or Stomach Fungi, of which Australia is particularly rich in species, over 60 of them recorded for Victoria alone. High in the gum trees were seen the big white hoof-shaped growths of Polyporus portentosus, the White Punk, a common cause of heart rot in Eucalypts. Low on the trunks there were the wide perennial brackets, hard as wood and marked with annual rings of growth like wood, of Fomes setulosus. It is also a wood destroyer. The fresh growing edge of the fungi is a mass of minute pores, like brown velvet.

(E. Lyndon

List of Birds Seen In the Wulgulmerang Area: by F.E. Jones.
(In the vernacular only).

Spurwing Plover.
Snipe.
White-faced Heron.
Black Duck.
Australian Goshawk.
Wedge-tailed Eagle.
Nankeen Kestrel.
Gang-gang Cockatoo.
Galah.
Crimson Rosella.
Eastern Rosella.
Kookaburra.
Fantailed Cuckoo.
Brush Cuckoo.
Grey Fantail.
Satin Flycatcher.
Flame Robin.
Yellow Robin.
Golden Whistler.
Rufous Whistler.
Grey Shrike-thrush.
Magpie-lark.

Brown Thornbill.
Striated Thornbill.
Yellow-tailed Thornbill.
White-browed Scrub-wren.
Superb Blue Wren.
Dusky Wood-swallow.
White-throated Tree-creeper.
Red-browed Tree-creeper.
Spotted Pardalote.
Eastern Striated Pardalote.
White-naped Honey-eater.
Fuscus Honey-eater.
Yellow-faced Honey-eater.
White-eared Honey-eater.
Crescent Honey-eater.
Eastern Spinebill.
Red Wattle-bird.
Pipit.
Raven.
White-winged Chough.
Pied Currawong.
Grey Butcher-bird.

White-backed Magpie.

(F.E. Jones

Melaleucas from Seed: by R.N. (Bob) Auchterlonie.

Australian native plants are not always easy to raise from seed. A plant found in flower in the bush may not have any seed ripe enough to collect, and a later visit at the estimated time of maturity may find it all shed. Seed may be obtained however, and subsequently found difficult to germinate and grow on.

The genus Melaleuca - Paperbarks or Honey Myrtles - provides a welcome exception to these difficulties, for two reasons. Firstly, ripe seed is available for the taking at any time throughout the year, and secondly, by following the simple procedure here described, germination is both easy and certain.

The melaleucas comprise roughly one hundred species, from small shrubs to medium size trees, and their flowers embrace a wide range of colours from white through cream, yellow, red, pink, mauve and lilac. They do not shed their seed annually when ripe, as do most plants. The capsules containing it remain in a sappy condition, and tightly closed so long as the parent plant remains alive and healthy. They remain firmly attached to the branch year after year, their sap circulation apparently keeping the seeds viable and the valves tightly closed. An old plant in a healthy state will thus be carrying seed of all ages up to ten, or even twenty years, the older capsules sometimes becoming embedded in, and almost over-grown by the enlarging branches. Only when forcibly removed, or when the plant or branch dies will the capsules open and release their seed. So the seed collector can gather a few capsules at any time of the year. These, when placed in a warm, dry place, will open after a week or so, releasing their seed.

Germination is easily brought about in the warmer months of the year by the saturation method. This calls for two receptacles, a smaller one, say a 4" flower pot containing suitable soil in which to sow the seed, and a larger watertight one containing water, in which the smaller pot is stood. Cement or tin cans should be avoided, as they contaminate the water with alkali or rust; any plastic or glass vessel of suitable size will serve. Seed is sown thinly, and covered with the merest sprinkling of fine sand. The seed pot is then stood in the larger vessel of water, and the water level adjusted to about 1" below the surface of the soil in the pot. A sheet of glass placed on top completes the set-up. Water enters the seed pot through the drainage holes, saturates it, and shows freely at the surface of the soil. The assembly is placed out in the open, but shaded from the fierce summer sun, which could 'cook' the contents. Soil and seed remain saturated until germination takes place, which will be in about ten days in summer.

This procedure may seem like rank heresy to the old school of gardeners, as it cuts right across the long-accepted rule of sowing

(Melaleucas From Seed Cont'd).

seeds in well-drained soil, and keeping just moist, but it assuredly works with melaleucas. The writer has used it successfully with *M. styphelioides*, *linariifolia*, *armillaris*, *hypericifolia*, *lateritia* and *neophila*; also with members of related genera *Callistemon* and *Leptospermum*. The seed of most of these species is extremely fine, but has a high germination percentage, and under this method every viable seed will grow, resulting in a thicket of seedlings unless care is taken to sow thinly.

When germination is complete, the glass can be gradually left off, the water level gradually reduced, and normal methods followed of pricking off into tubes or tins for growing on.

Several of the *Melaleucas* are worthy of wider use for hedges, breakwinds and specimen trees. *M. linariifolia* compares more than favourably with the exotic *Cupressus lambertiana* for every purpose for which the latter is so widely used. It has a soft, pleasing appearance, can be trimmed hard, or left to grow naturally, when it produces spectacular white flowers in summer, it withstands extremes of wetness and drought, is less inflammable, and, moreover, is Australian.

----- Bob Auchterlonie -----

Warragul Field Naturalists Club: Notes, by the Publicity Officer, Mr. Chas. Hill.

At a recent meeting of the Committee quite a lot of time and thought went into arranging a suitable program for the ensuing year. It was decided to devote each month to a particular subject as follows:-
1968.

April.	Geology.	November.	Native Daisies.
May.	Eucalypts.	December.	Entomology.
June.	Fungi.	<u>1969.</u>	
July.	Rivers.	January.	Reptiles.
August.	Acacias.	February.	Artifacts.
September.	Birds.		
October.	Ferns. (Native).		

Members will be requested to study and learn as much as possible about the particular subject for the month and at the following meeting to pool our knowledge and by that means hope to learn a little from each other. A guest speaker would be also arranged for each alternate meeting starting with April, when a talk on 'Gemstones' by a very knowledgeable speaker will be presented. The other meetings will be members' nights. Decided also to obtain suitable films for showing through the year.- The March meeting will be a members night. Let us have a good attendance to start off the new year!

--- Chas Hill ---

WARRAGUL FIELD NATURALISTS CLUB.

1968 - 1969.

OFFICERS.

President: Mrs. D. Algio, NEERIM SOUTH.
Vice-Pres- Mrs. A.R. Jencke, Westernport Road, DROUIN SOUTH.
idents: Mr. Dick Briggs, 59. Brandy Creek Rd. WARRAGUL.
Secretary: and Mr. Jack Brooks, Box 120, WARRAGUL.
TREASURER:
Committee: All the above with:-
Mr. Don Steele, Edinburgh St., WARRAGUL.
Mr. Chas. Hill, 54 Brandy Creek Rd., WARRAGUL.

Latrobe Val-
ley Natural-
ist:

A Reminder:

Will members please note that the 'Latrobe Valley Naturalist' is their only means of knowing when Club meetings are to be held.

Meetings: General meetings of members:

The third Friday in each month at 8 p.m..
Place: The Warragul (Albert St.) State School.
Friends and visitors are assured of a warm welcome.

Excursions: Arranged, as possible and usually two weeks after the general meeting for the month.

Warragul members are invited also to join the excursions of associated Clubs.

Subscriptions: Annual subscriptions become due at the end of February in each year and are:-

Family.	\$1.50
Single.	\$1.00
Junior (Attending School)	50c.

Jack Brooks.

Secretary & Treasurer.

Latrobe Valley Naturalist.

TRARALGON FIELD NATURALISTS CLUB.

TRARALGON. VICT.

OFFICE-BEARERS:

PRESIDENT: Mr. Geoff. Proudfoot, 25 Dunbar Road, Traralgon.
VICE-PRESIDENT: Mr. G. Valentine, 36 Chenhall Crescent, Traralgon.
SECRETARY/TREASURER: Dr. D.W. Collins, 4 Charles Street, Traralgon.
EXCURSION LEADER & PUBLICITY OFFICER: Mr. G. Marshall, Elliott Street, Traralgon.
EXECUTIVE COMMITTEE: The above (temporarily).

MEETINGS:

General Meetings are held at the Grey Street State School on the second Friday in each month at 7.30 p.m..

EXCURSIONS:

For the first few months the excursions will be visits to local areas of interest, and will cater especially for members who are new to field naturalist work.

Excursions are held on the Sunday following each monthly meeting.

SUBSCRIPTIONS:

\$1.00	Single Membership.
\$1.50	Family Membership.
.25c	Junior Membership.

The Latrobe Valley Naturalist will be posted to financial members of the Club;- for the first year of the Club members requiring 'The Naturalist' will be required to pay 50c in addition to the above.

D.W. Collins.

LATROBE VALLEY FIELD NATURALISTS

CLUB.

Yallourn,
VICTORIA.

Office-Bearers 1967 - 1968.

President: Mr. E. Homann, 84 Hennessey St., Moe.
Vice-Presidents: Messrs. J. Peterson, F.E. Jones and G.T. Scanlan.
Treasurer: Mr. E. McElroy, 35 Latrobe Street, Morwell.
Excursion Secretary: Miss N. Rossiter, Railway Avenue, Yallourn.
Publicity Officer: Mrs. Bon Thompson, Traralgon South.
Hon. Editor: Mr. G.T. Scanlan, L.V.C. Hospital, Yallourn.

Hon. Secretary: Mr. S. Belgraver, 179. Lloyd Street, Moe.

General Meetings.

Are held at the Yallourn State School on the 4th. Friday of each month, commencing at 7.30 p.m. A programme of proceedings may be obtained from the Secretary.

Excursions.

These are in the nature of field days under competent leaders and are held, usually, on the Saturday following the general meeting.
Visitors are welcome to both meetings and excursions.

Subscriptions.

Membership subscriptions become due in March of each year. The amount includes the cost of this publication, which is issued each month. Subscriptions are as follows:-

For adults:	\$1.00
For families:	1.50
Juniors:	.10

The 'Latrobe Valley Naturalist' is the official publication of the Club. It can be issued only to financial members of the Club with some few exceptions under postal Regulations.

The responsibility for matter printed in the 'Naturalist' is generally with the contributors. Every reasonable efforts are made to ensure the accuracy of the matter printed herein.

Contributions are invited from members, and others, on any aspect of Natural history which could be considered of interest to the members of the Club. They should be addressed to:

G.T. Scanlan,
c/o L.V.C. Hospital,
YALLOURN. VICT. 3838.

ISSUE No. 52.

APRIL, 1968



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LATROBE VALLEY FIELD NATURALISTS CLUB.

YALLOURN. VICTORIA.

Dear Fellow Field Naturalists,

General meeting Friday 26th. April: This is to include a talk entitled 'Ecology - Water Environment' by Mr. D. Chalmers.

Excursion for April: This was to have followed the general meeting talk by Mr. Chalmers referred to above, on the following day, but the Excursion Secretary, Miss N.T. Rossiter has provided the altered arrangements for the follow-up as:

Because Mr. Chalmers, who is giving the talk on 'Ecology - Water Environment' to the Club on April 26th, will not be available to lead the 'follow-up' excursion on Saturday April 27th. this has had to be postponed and will now take place on Sunday May 5th.

Owing to the prolonged dry weather Mr. Chalmers cannot at this stage tell us where he will be taking members to study water environment, but has asked that they will meet him at Lake Guthridge, Sale, at 10.30 a.m. on Sunday May 5th.

It is hoped that members of the Sale Club will be able to join us on this excursion.

----- N.T.R. -----

Report of the Executive Committee Meeting held Monday 1st. April at the home of Mr. ' Mrs. O. Thompson, Traralgon South:

Appointment of Committee of Management Boola Boola Reserve: President E. Homann reported that at the Public Meeting held on 25th. March the following were nominated and duly elected members of the Committee to manage the Reserve;-

Messrs. E.H. Homann, F.E. Jones and T. Moretti.

Victorian Koala Count: On Monday 22nd. April, pupils of grades 4. 5. and 6 of the State schools of Victoria and, it is hoped, pupils of private schools in this district, are to assist in taking a count of Koalas. The result will be awaited with great interest.

Natural History Classes: It was reported that the classes in natural history, which have been arranged in collaboration with the Council of Adult Education, will commence on Friday 19th. April, at the Yallourn State School. The first of the eight introductory classes will be given by Astronomical Society member Mr. K.E. Bryant, his subject being entitled 'Our place in Space'.

(Cont'd over ...)

(Natural History Classes Cont'd)

The principal tutor for the classes is Mr. D.G. Chalmers, 66 Church Street, Yallourn, and of the Yallourn High School. The Secretary is Mr. K.E. Bryant, 20 Hillside, Yallourn, and Pharmacist Manager of the Yallourn Friendly Society. Enquiries should be made to Mr. Bryant.

Membership Subscription Increases: The Executive was instructed by members at the Annual General Meeting to consider an increase in membership fees to cover, principally, the cost of publishing the 'Naturalist'. As from the 1st. April 1968, therefore, subscriptions will be as follows:

Single Members.	\$1.50	per year.
Families.	2.00	" "

Members of associated F.N. Clubs receiving the 'Naturalist' will be asked to pay \$1.00 a year or 10c. for a single copy.

It is necessary to again remind members that the 'Naturalist' can be posted only to members who are financial. The prompt payment of subscriptions will also assist the Treasurer to meet Club commitments.

ORCHIDS OF THE WULGULMERANG AREA: by J. Peterson.

Sighted during the excursion 27th., 28th., and 29th. Jany. 68.

Eriochilus cucullatus
Pterostylis alpina.
" decurva
Prasophyllum odoratum (?)
" sp. unidentified.
Gastrodia sesamoides
Microtis oblonga

The abnormally dry season had its effects on the orchids as can be seen by the following list of additional orchids seen in January 1967 at the same places visited by the 1968 excursion:-

Thelymitra cyanea (?)	Caladenia pallida
" ixioides	Spiculaea huntiana
Pterostylis falcata	Dipodium punctatum
" obtusa	
Prasophyllum nigricans	
" gracile	

WEEKEND AT WILSON'S PROMONTORY: 4TH. - 5TH. November 1967.
by Miss Betty Kemp.

This is a very belated report of the Wilson's Promontory weekend, for which the writer apologises and trusts that it will at least bring back some happy memories for those who attended and release this excursion from the limbo of a 'lost weekend'.

Our camp-out at the Prom, started inauspiciously with early mist, than a beautiful sunny day with a cool wind. We were a cozy little group of about a dozen caravans and tents camped under the tea-tree at Tidal River. Mrs. Lyndon, our leader, and Mr. Lyndon had settled in the previous day and they were already on an excursion to the rubbish tip area at the foot of Mt. Oberon by the time of the writer's arrival on the Saturday morning.

Here the experts had recognised many species of plants. Several varieties of yellow Guinea Flowers with their five notched petals were seen, as well as Mauve Daisies (*Olearia ciliata*), and there was plenty of small Tea-tree, the Silky Tea-tree with round white 5-petalled flowers pink tinged (*Leptospermum myrsinoides*). In the swampy areas were Forked Sundews (*Drosera binata*) and Coral Fern, especially the pouched variety (*Gleichenia circinnata*) which is sometimes called Umbrella Fern (*G. microphylla*) as it is difficult to tell them apart. Here also were Xyris (the old name for Iris) operculata, the Tall Yellow-eye with its single bright yellow Iris flower of three petals emerging from a bowl of brown bracts, and blue and purple Flags - *Pater-sonia* with short-stemmed flowers and rounded rush-like leaves, *P. glabrata* with clear light blue flowers (found only on the Promontory), *P. fragilis* (Short Purple-flag), and *P. longiscapa* with purple flowers very tall above broad leaves.

There were good examples of Liverwort (*Marchantia polymorpha*) and many Milkmaids (*Burchardia umbellata*) with their six sharp white petals; also very small white Rice-flowers (*Pimelia humilis*), and Red Correa reflexa. Among the Peas were two kinds of Dillwynia - short and bushy - Showy Parrot Pea (*D. sericea*) with flowers in the leaf axils, and Red Parrot Pea (*D. hispida*) with flowers grouped on long slender stalks; Pale Wedge Pea (*Gompholobium huegii*); Leafless Globe Pea (*Sphaerolobium vimineum*) with rush-like stems; Purple Swainson-pea (*Swainsona lessertifolia*), very common on sand; Large-leaf Bush Pea (*Pultenaea daphnoides*) with leaves ending in a pointed spike; Aotus villosa, a yellow pea shrub, and the ground-hugging red Running Postman (*Kennedyia prostrata*).

Among the climbers were the Love Creeper (*Comesperma volubile*) running along the bracken with its racemes of blue flowers, and the Common Appleberry with its yellowish bells. In the heathlands, another blue racemed flower, the Blue-spike Milkwort (*Comesperma calymega*) stood tall and straight. The Everlasting Daisies were represented by the large yellow Curly Everlasting (*Helichrysum scorpioides*), and the

(Cont'd over ...)

(Wilson's Promontory Weekend Cont'd).

small white many-flowered *H. obtusifolium*, and the Daisy-bushes by the Starry Daisy-bush (*Olearia stellata*) with its coarse toothed dark green leaves white felted underneath. Here and there were the colourful Purple Groundsel (*Senecio elegans*), an introduction from South Africa, the tall white spikes of the 'Scented Candles' (*Stackhousia monogyna*), and the tiny four-petalled yellow-orange flowers of the Australian St. John's Wort (*Hypericum gramineum*). In the swampy parts were the mauve-flowered Swamp Mazus (*Mazus pumilis*) with its rosettes of wavy-edged oblong leaves, and graceful Tassel Cord-rush (*Restio tetraphyllus*).

A break for lunch, then off to Lilly Pilly Gully. At the entrance to the gully track we were greeted by more Silky Tea-tree and the sickly sweet scent of *Kunzea ambigua* blossom which lined the track. Combined with the flowering Coastal Tea-tree, they made a pretty foreground to the wonderful view across the valley to Mt. Oberon and the mountains further east. Here also were small white Everlastings and stunted Brown Stringy Bark (*Eucalyptus bacteri*) whose interesting looking fruit had a red-ringed centre which rose in peaks. Along the track were *Banksias* (*marginata*), spiky Silky Hakeas with purple and green fruits shaped like stomachs, and *Hakea ulicina* with its lone flat narrow leaves. Red *Correa reflexa*, pink *Tetratheca* and yellow *Hibbertia* and *Aotus villosa* provided splashes of colour.

Further along the track, as the bush grew taller on either side we saw our first Lillypilly (*Acmena smithii*), the furthest west it grows in Victoria. Tall Hop Goodenia (*G. ovata*) climbed up through the bush, while the graceful slender Forest Starwort (*Stellaria flaccida*) trailed its small white stars at a lower level. Here also were the Austral Mulberry (*Hodycarya angustifolia*), tall growing Large-leaf Bush Pea and taller prickly Manuka (*Leptospermum juniperinum*). At one stage Swamp Paperbarks (*Melaleuca ericifolia*) took over, while here and there the yellow catkins of tall fine-leaved *Acacias* (*A. verticillata* ?) carpeted the track.

Gradually the vegetation became more lush, with more Lilly-pillies interspersed with the Blanket-leaf Tree (*Bedfordia salicina*) and Hazel pomaderris (*P. aspera*) with its tiny Mignonette-like flowers and blanket-like leaves. These made a fine sight in combination, especially with the beautiful Clematis (*C. aristata*) spreading its white flowers and soft feathery seeds through them. Here also a Wonga Vine (*Pandorea pandorana*) climbed by the side of the track, and there were small and taller bushes of the Prickly Currant-bush (*Coprosmia quadrifida*) which later would carry many tiny red berries. Evidence of bush fires was around us in fallen giants and huge burned stumps.

A Spider Orchid (*Caladenia tessellata* ?), red-tongued and with clubbed sepals, claimed our attention and, further on, a Pink Finger Orchid (*Caladenia carnea*). Now *Hibbertia dentata* spread long graceful stems, showing off its golden flowers of five dentated petals with

(Cont'd over ...)

(Wilson's Promontory Weekend Cont'd)

stamens all to one side of the style and reminding one of the lovely Jasmine in flower and habit of growth. Small red Heath appeared here and there and pink Teteatheca ciliata with its turned back brown sepals and hairy leaves growing in threes. There were tall white-flowered shrubs - the Sandfly Zieria (Z. smithii), which is related to the Boronia, with clusters of small four-petalled white flowers and unpleasantly aromatic long-pointed leaves grouped in threes, and the Musk Daisy-bush (Olearia argophylla). Here we became aware of birds - a Crescent Honeyeater and a Golden Whistler - and a Wallaby stood and stared at us from the bush until, outstared by us, it moved off to a safer area.

At last we came to the open stream, with tall white Daisy Bush, the soft white drapery of Clomatis, and tree ferns adding beauty to the scene. Now began the hard bit of following our intrepid leader along the stream in search of ferns - not the big ones we fell over and under, but the hidden ones that the area promised. Altogether 14 different ferns were identified here and have been listed separately by Mrs. Lyndon in an earlier report. Unreported were the many mosquitoes that hailed us with delight, having obtained little satisfaction from the three well protected furry Koalas (a silver-grey mother with baby aback and another adult) which we spied high up in nearby Eucalypts. It was cool and dark under the tall eucalypts, with the sunlight filtering through, but now and then we glimpsed across the stream blue sky, high peaks of distant mountains and the tall white ghosts of dead giants still standing above the younger forest trees. Here were young Lilly-pillies coming up, and it was gratifying to see the wonderful rejuvenation from the bush fires. At the foot of a very tall eucalypt survivor, we found large blue capsules, rugged and ribbed, which were identified as those of the Tasmanian Blue Gum (E. globulus).

On the way back, the stragglers had time to notice the little things missed on the way in - the beds of tiny Wild Violets on drying moss at the side of the track, Maiden Hair, and blue Love Creeper.

Night found us at the Village Hall where we and other visitors were entertained with slides of animals and birds by Messrs. Don Lyndon and Frank Jones. Back at camp, a rising wind warned of a coming change in weather and we were glad of the protecting Tea-tree around and over us - that is, those of us who were protected. A sudden wild gust sent the inmates of at least one tent scrambling out with dust-filled eyes and mouths to find their protection sadly reduced against a wet and windy night.

However, we were ready for the next morning's excursion, this time to Little Oberon Bay. The weather continued wet and windy as we made our way along the undulating track through Banksias, scented lanes of tall Kunzea and tunnels of Coast Tea-tree. There were small white Everlastings, yellow Senecios, white Milkmaids, the blue Love-Creeper and,

(Cont'd over ...)

(Wilson's Promontory Weekend Cont'd)

everywhere, Purple Swainson-pea and bracken. Now it became more open - shells appeared in the soil and there was a sound of pounding surf. Little Oberon towered over us. Suddenly the air was salt and we came out onto the beach and surf over spreading Noon-flower, disturbing a number of Sooty Oyster Catchers, sooty black with bright red bill, legs and feet.

Leaving the beach, we commenced the long slanting climb up the cliff track, its sides decorated by bushes of the Paper-flower (*Thoasia petalocalyx*) with its pretty little pale mauve flowers of 5 petals and 3 green sepals and small Correa-like leaves. Here also were the Black-anther Flax-lily (*Dianella revoluta*) with its dark starry (blue) flowers and yellow and dark brown stamens, Boobialla (*Myorum insulare*), Pomaderris, Coast Beard-heath (*Leucopogon parviflorus*) and the soft green lines of the Drooping She-Oak (*Casuarina stricta*). As we climbed, we were rewarded by wonderful vistas of wild surf, grey-green seas and misty islands. The sun was trying to break through, lighting up the sea for an instant and then retreating, teasing that band of amateur (and not so amateur) colour photographers.

Now came golden Hop Goodenia mixed with Paper-flower and Kunzea, and the new red leaves clustered at the stem ends of the red Correas. Still we climbed, by Silky Hakeas, Silver Banksia (*B. marginata*) with its narrow leaves cut off across the tips, and large-leaf Bush Pea. Low Kunzea and She-Oaks climbed the slopes above and below us. A blue Sun Orchid (*Thelymitra grandiflora*) and another *Caladenia tessellata* were discovered, and we noticed purple Daisies, Rice-flower, some Pink Tea-tree and Prickly Geebung (*Persoonia juniperina*).

At last we reached the end of the climb, traversed the short flat stretch across the wind-swept top, and then new muscles came into play as we started down the other side to Little Oberon Bay - a long way down it seemed. Entering a She-Oak forest we rested awhile and then went on, determined to see the Bay, while others turned back to visit Norman Point at the top of the cliffs, to watch the boiling surf on the rocks far below and be nearly blown away by the strong wind. Here one could study the changing colours of the sea whipped by the wind, as clouds piled up, then moved aside for the sun.

The sun was well out by the time we got back to camp for lunch. Rather belatedly we discovered a Blue Wren's nest with young in the grass at the foot of a tall Tea-tree between our caravans, the little father scolding us roundly for going too near to examine it.

During the weekend we were joined by fellow 'Field Nats' from Bairnsdale, Leongatha, Sale and Traralgon, which added considerably to the enjoyment of a wonderful weekend. Thanks were expressed to Mrs. Lyndon for her happy and profitable leadership.

MORE BOTANICAL NOTES FROM THE WULGULMERANG WEEKEND: by
Miss Jean Galbraith.

A few notes on plants of special interest at Wulgulmerang may add something to Miss Rossiter's valuable record of the weekend and its plant list.

Stylidium lineare.— This determination has been checked at the National Herbarium and our collection is definitely the first record for Victoria. Apart from one collection near Nowra in the last century, the plant has not till now been found outside the Sydney sandstone and Blue Mountains area where it is not rare.

It resembles a small slender S. graminifolium, but has a tuft only 1 - 2 inches across of firm narrow pointed leaves, and there are appendages in the centre of the flower to the number of eight (there are six in graminifolium). It grows in colonies in damp soil.

Hypoxis hygrometrica.— This is interesting because it reverses the usual development - that lowland plants found at high altitudes are more richly coloured and more hairy and dwarf than at low altitudes. Golden Weatherglass is orange, with many long white hairs on leaves and stems in our own locality, but on Rocky Plain (probably over 4,000 feet) it is light bright yellow with a few inconspicuous long hairs, and plants there are more robust than our specimens.

With Ranunculus millanii on Rocky Plain grew also R. collinus, not found amongst my specimens when Miss Rossiter compiled her list, because entangled with R. millanii and an unfamiliar species which Mr. Willis considers a hybrid between R. millanii and R. collinus. (R. millanii has very narrow pinnate leaves, almost thread-like, and R. collinus has leaves of three toothed or lobed leaflets).

The Thesium mentioned by Miss Rossiter is so rare (though scattered through eastern Australia) that few botanists have seen it growing in Victoria. It is supposed to be parasitic on grass or ... roots, and this is borne out by its colour - not green but more brownish yellow.

----- J. Galbraith -----

Editor's Note: To provide variety, as well as to keep the 'Naturalist' going, a steady flow of contributions is sought. If you have contributed something that has not yet appeared, it will almost certainly be printed in the near future. Our associated Clubs are again invited to share their experiences and knowledge.

----- G.T.S. -----

SPEAKING OF KINGFISHERS: by Mrs. E. Lyndon.

While we were staying in the caravan park in Sale recently, March 4th. to be exact, there was an Azure Kingfisher (*Alcyon azurea*) flying busily up and down a small waterway known as McArdle's Gap, at a point very close to the junction of the Latrobe River and the Canal. As I watched it made several dives from a favored perching spot some ten feet above the water. It dived at an angle, bullet fast, and emerged immediately, returning again to its perch. When passing up or down stream it flew very fast and close to the water, almost under the willow roots, sometimes perching on them. At Valencia Creek too, we had seen this brilliant orange-breasted bird skimming the pools. I have never given so much attention to the Kingfishers and had anyone asked me to describe their plumage in detail I should certainly have been at a loss to do so. We had watched the greenish-blue and white Sacred Kingfisher (*Halcyon sanctus*) nesting in a dry creekbed at Whorouly and had handled an immature one at Licola, but had not been able to handle the Azure Kingfisher. This week Mr. and Mrs. Brewster brought me a bird they had picked up in the paddock, badly injured by a stab wound in the side. Although it seemed lively enough then, it had died before nightfall and was dead when I saw it. Before passing it along to the Museum I made these observations.

The colors are striking, rich ultramarine blue and burnt orange combined with black and white. The strong straight bill is black, measuring from the tip of the upper mandible to the corner of the gape, 3 inches, with the lower mandible slightly shorter than the upper. There is a streak of buff color each side in the blue-black feathers on top of the bill, between eye and nostril. Birds have a third eyelid, a clear covering to protect the eye, possibly, in this case, in diving. It is folded into the front corner of the eye. There are bold whitish tufts of feathers, tinged with buff, on either side of the neck half an inch below the corner of the eye. Only tufts, not a collar as in the Sacred Kingfisher.

The gorgeous ultramarine extends from the forehead over the crown and right down the centre back, with color deepest on the rump, overlapping the black feathers in the short stiff tail. (This tail acts as an extra leg or a brace when the bird is clinging to a tree or a bank). The wing coverts are misted with blue and the black primary feathers are miracles of transparent webbing.

The underparts: Beginning under the lower mandible like an inverted V and running down the throat there are fine white feathers overlaid with a hint of buff, the color deepening on the breast to a rich burnt orange which continues down the abdomen almost to the tip of the tail. The sides of the body and the underwings are of the same orange color, so that when viewed from below with outstretched wings the whole bird would appear to be of this wonderful coloring.

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(Speaking of Kingfishers-Cont'd.)

The short legs and the feet are pinkish orange, with three toes. Of the two front toes the inner or middle toe is longer than the outer or ring toe, and the hind toe is shorter still. Each toe is equipped with a long sharp curved claw; the two front toes are joined in one skin for half their length, with what could be the butt of a rudimentary fourth or index toe at the base of the longest one. It is of interest that the Rainbow Bird and the Dollar Bird both share this feature of the syndactylous or joined toes with the Kingfishers. The colors on this bird seem bright and definite but it is possible that it is not quite mature. It measures less than 7 inches from tip to tip. Sharland in 'Tasmanian Birds' gives 8 inches for both the Sacred and the Azure Kingfishers. Hindwood gives an 'overall length of almost 8 inches' for the Azure one. Ten species of Kingfishers are found in Australia, ranging from the Kookaburra, the largest, 18 inches in length. down to the Little Kingfisher of the north, a mere 4 inches.

----- Ellen Lyndon -----

MOUNTAIN PEPPER (Drimys): by Miss Jean Galbraith.

Those of us who grow up with one plant name run a certain risk of reverting to it in careless moments, even if it has been changed for years. There is an example of this in the valuable record of plants seen during our Wulgulmerang excursion, and most carefully compiled by Miss Rossiter. When I first knew Drimys all Victorian plants of that group were known as Drimys lanceolata. Later (Vic. Naturalist Mar. 1957) Mr. Willis pointed out that two distinct species were covered by that name;— D. lanceolata with dark green, pointed, relatively thin leaves and D. xerophila with yellowish green, blunt thick leaves.

On Mt. Wombargo we saw Drimys xerophila, a plant of open, usually mountain forests, but when asked to name it I answered thoughtlessly 'D. lanceolata'; though that name now belongs only to the dark green shrub of dense sheltered forests and streamsides. Later, asked again, I answered a bit less carelessly (and correctly) 'D. xerophila'. That is how both species were recorded though only one was seen. I can't even plead ignorance and quote Dr. Johnson; "Ignorance Madam, pure ignorance." Instead I say regretfully; "Carelessness Madam (and Sir), pure carelessness ! "

----- Jean Galbraith -----

LATROBE VALLEY FIELD NATURALISTS CLUB.

YALLOURN. VICTORIA.

- Honorary Secretary: Mr. S. Belgraver, 179 Lloyd Street, Moe.
- Meetings: General Meetings are held on the fourth Friday of each month at the Yallourn State School commencing at 7.30 p.m..
- Excursions: Usually on the Saturday or Sunday following the general meeting.
- The programme of events for the year may be obtained from the Secretary.
- 'The Naturalist' 'The Latrobe Valley Naturalist' is the official publication of the Club. Contributions on any aspect of natural history are invited.
-

WARRAGUL FIELD NATURALISTS CLUB.

WARRAGUL. VICTORIA.

- Honorary Secretary: Mr. Jack Brooks, P.O. Box No. 120, Warragul.
- Meetings: Are held on the third Friday of each month at the Albert Street State School, beginning at 8 p.m.
- Excursions: Are held as arranged, usually two weeks after the general meeting for the month.
-

TRARALGON FIELD NATURALISTS CLUB.

TRARALGON. VICTORIA.

- Honorary Secretary: Dr. D.W. Collins, 4 Charles Street, Traralgon.
- Meetings: Are held on the second Friday of each month at the Grey Street State School, starting at 7.30 p.m..
- Excursions: Are arranged for the Sunday following the General Meeting.

All the Clubs welcome visitors at General Meetings and on the excursions.

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LATROBE VALLEY FIELD NATURALISTS CLUB.

YALLOURN. VICTORIA.

Dear Fellow Field Naturalists,

General Meeting Friday 24th. May 1968: Mr. Bruce Fuhrer will talk to members on 'Mosses, Ferns and Lichens'. The meeting will be held at the Yallourn State School, and should commence at 7.30 p.m.. The Excursion will be on the following day, Saturday May 25th. and will be led by Mr. Fuhrer with the object of finding, in the field, some of the plants talked about on the previous evening.

The excursion will be along the Upper Traralgon Creek, and into Bulga Park. Members are asked to meet at the Traralgon High School on the corner of Liddiard Road and Shakespeare Street, at 9.30 a.m.. The morning will be spent in searching along the Traralgon Creek, and it is expected that the party will move on to Bulga Park for lunch, to be followed by an exploration of the Park during the afternoon.

Excursion Secretary Miss N.T. Rossiter, who has supplied this information, should be contacted for any further information.

Classes in Natural History. The introductory classes in Natural History which commenced with a lecture on Astronomy by Mr. Ken. Bryant and are now being conducted by Mr. D. Chalmers at the Yallourn High School, are proceeding very satisfactorily with an enrolment in the vicinity of 33 students.

Executive Meeting Notes: Some of the matters discussed at the May meeting, held at the home of Mr. & Mrs. Ern Homann included:-

Subscriptions. The Treasurer reported that some members who paid their subscriptions before receiving notice of the increases in the April 'Naturalist' are underpaid. The increase was made to cover increases in the cost of producing this magazine. Will those members involved, and those who have not yet done so, send their underpayments or subscriptions to the Treasurer.

The 'Naturalist'. Some members have expressed a wish that the cover of the 'Naturalist' should again bear the more or less official emblem of the Club, the Flying Duck Orchid, and it is now hoped that this can be done when the present covers already printed run out at September next. While this is being arranged, members are invited to make any suggestions for alterations which might result in the magazine becoming a more useful addition to the literature on subjects of natural history interest.

(Editor).

MUSHROOMS: by R.N. (Bob) Auchterlonie.

With mushrooms as with fish, great numbers and large size are usually considered topics of special interest. In the former regard, the last week of April this year brought such a prolific crop of mushrooms as one rarely sees. Almost wherever one went over the paddocks, they were there in countless thousands. This is the more remarkable when one considers the small amount of rain prior to their appearance. On the 14th. and 15th. April, 41 points fell, followed on the four days 20th. to 23rd. by a further 92 points. The real soaking rains of over two inches did not come till the 29th. and 30th., by which time most of the mushrooms were fully grown, with a few late comers just breaking through the surface.

By far the greatest number were, of course, were the common field mushroom, Psalliota campestris, with caps varying in colour from purest white to dark brown, some reaching the size of a saucer when fully grown, but most about half that size. Occasional horse mushrooms, P. arvensis, were noted, a much larger and coarser species, with caps up to the size of a dinner plate, usually snowy white, sometimes with a yellow flush on the boss. They can be distinguished by their double ring round the stem, and greyish-pink gills in the young stage as compared with the bright pink of the field mushroom. Incidentally, the two specific names, campestris and arvensis mean precisely the same thing, viz., 'of the fields'.

Our largest mushroom has no common name as far as I know, but is botanically known as Boletus portentatus. It is a huge fungus, all white, with pores beneath instead of gills. Never plentiful, single or scattered specimens occur at long intervals. Here are the dimensions of one found near the Wilderness Creek at Driffield a few years ago:- Cap, 16" across, thickness 3", of which the upper 2" was pith, and the lower 1" pores; the diameter of its slightly bulbous stem was 7", and its total weight 7 lbs. 2 oz.. This is by no means a record, as very much greater weights have been recorded. These monsters are said to be edible, though who would want to eat them I do not know. It may be just a coincidence, but every one of this species I have found, have been growing in the vicinity of Swamp Gum, Eucalyptus ovata. Another species, B. lutens, usually found under Pinus radiata trees, is known to have symbiotic relationship with that tree, so perhaps a similar association exists between B. portentatus and the Swamp Gum.

----- Bob Auchterlonie -----

THE GOLDEN-headed FANTAIL-warbler: by F.E. Jones.

This bird was observed on the excursion to the Sale Common on March 31st. 1968.

One of our native birds that usually escapes notice even when it occurs in settled areas is the Golden-headed Fantail-warbler or

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(Golden-headed Fantail-warbler Cont'd).

Tailor-bird. It is a very small orange-brown bird, and frequents areas of rank grass and reedbeds, and occurs in most parts of Australia wherever the habitat is suitable. It can best be seen while singing, with a sustained and cheerful song, for at such times it perches a little above the surrounding vegetation, otherwise it is rather difficult to observe. It is likely to be found anywhere in Gippsland where there is plenty of tall grass, and particularly near swamps and rivers.

This bird should not be confused with the Reed Warbler, which is a bigger bird and confines its activities to the reedbeds, whereas the Golden-headed Fantail-warbler makes many open flights over the grasslands.

Its nest is composed of fine grass and other materials, and usually a few broad leaves are worked into the nest. There is some difference of opinion as to whether these leaves are ever actually sown on. The scientific name is *Cisticola exilis*, and this name and the fact that it is the only *Cisticola* in Australia has led some people to call it the 'Exiled Warbler' - however, the word *exilis* means slender.

----- F.E. Jones -----

SOME NOTES ON THE WULGULMERANG BOTANICAL LIST: by Keith Rogers.

It has been most interesting to read the botanical list, compiled by Miss N.T. Rossiter, of species collected on the Wulgulmerang weekend of January 27th. to 29th. 1968. This quite imposing list is evidence of the amount of work Miss Rossiter has put into the task of recording and classifying each specimen. Also valuable is her introductory description of many of the plants as seen in the field.

Mention must be made too of the great help so readily given at all times by Miss Galbraith. Certainly without her keen botanical eye that prize of the tour, the little Stylidium liniero from Rocky Plain would surely never have been recognized as a species new to Victoria !

Whilst no one suggests the list could embrace all plants of the area covered, particularly in a drought year, there are a few more species that might have been included. Of the plants seen and noted in the area, one of the most important additions would be Heli-chrysum conditum, a shrub so common around Black Mountain and Suggan Buggan. This species, though definitely noted, was by some unaccountable reason mixed up with H. thyrsoideum, which is a very different species and also abundant in the district. Both shrubs are sweet scented

(Cont'd over ...)

(Wulgulmerang botanical list Cont'd).

when in bloom and very attractive. Two other members of the genus are very common here, but were probably finished flowering. They are the herbaceous H. scorpioides and H. apiculatum of the grasslands.

As a matter of interest, there are about 15 species of Helichrysum within a 20 mile radius of 'Rockbank'.

Another important addition to the list because it is typical of this area, and was noted on the tour, is Pultenaea subspicata, a mat plant that is quite abundant. It covers the ground with a coppery red sheen when in flower. However, since most Pea flowers are Spring flowering, the many other local species were not noticed.

One omission, doubtless an oversight, was Acacia implexa, the Lightwood, that was seen along the road from Buchan to Murrindal, and also in Suggan Buggan. This tree does not grow on the tableland.

In the family Proteaceae it will doubtless be noted that by accident Persoonia chamaepeuce was wrongly included with Banksia.

These additions to Miss Rossiter's list have been placed in order of importance as typical of the flora of the district at the time of collection, rather than in botanical sequence. It would probably surprise Club members to discover how many more species could be added in the same area during the Spring and Summer months of any normal year.

In conclusion, two finds of local interest turned up within a week of the tour. One was Sagina procumbens, found in a dried out watercourse on Rocky Plain. This water loving mat plant, which, according to 'Ewart', is widely distributed, and even cosmopolitan, has not previously been recorded in this locality.

The other locally rare little creeping plant was noticed on the flat across the river from where the main group of campers erected their weekend 'village'. This plant is Muehlenbeckia axillaris, or Matted Lignum. It also occurs on a creek near the Buchan River a few miles west of Black Mountain.

----- Keith Rogers -----

THE OWLET NIGHTJAR: by Mrs. Bon Thompson.

This bird was found along Traralgon Creek Road alive but unable to fly. We took it to the Fisheries & Wildlife Department representative for identification, as it was not known to us.

The size of the beak was very small although hooked, and the hairs above the beak were plumed.

----- B. Thompson -----

THE BEGINNING OF A NORTH-EASTERN FIELD NATURALIST CLUB:
by Miss Joan Galbraith.

On April 6th. five members of the Latrobe Valley Field Naturalist Club and several from the Sale Club, had the pleasure of meeting other nature-lovers on the Dargo High Plains. Those whom we met were gathered to form a North-eastern F.N.C. which was envisaged as an association of small groups of naturelovers of the far north-east (approximately Wangaratta to Harrietville and Mt. Beauty to Wodonga, but no limits were defined). At present the only north-east Club is at Benalla.

The new Club was formed next day with Mr. Dewar W. Goode, as President. Mr. Goode is of the National Parks Authority, and widely known as a worker for nature conservation, and, as he owns a farm at Beechworth, qualifies as a north-eastern naturalist. We have not yet heard the name of the new Club.

The two parties met near Treasure's homestead and moved to a grassy clearing for lunch. It was a pleasant place, ringed by Snow Gums and Black Sallee, springy underfoot with snow-grass, and with scattered outcrops of volcanic rock which were just right for backrests and tables.

The party, beside the Gippslanders, consisted of a carload of north-eastern naturalists and a bus load of Melbourne naturalists who were supporting the formation of the new Club. After lunch Mr. Goode outlined the plan to form a new Field Naturalist Club, and spoke of the role it could play in conservation, and the practical as well as aesthetic need for more National Parks. He was supported by Mr. Taylor, President of the Victorian National Parks Association, who added to his good reasons a reference to the spiritual refreshment of unspoiled places, and Mr. Ros. Garnet, Honorary Secretary of the Victorian National Parks Association, who spoke of the need for an Alpine National Park. (Those interested should see the March 1968 V.N.P.A. Newsletter). Mr. Lee, Honorary Secretary of the Field Naturalist Club of Victoria, added his own weighty reasons for the protection of natural beauty, while Mrs. Hoy of Wangaratta, who has been a moving spirit in the formation of the new Club, spoke of the pleasure and support (known to all of us) of finding so many people with similar ideals of conservation. "For so long", she said, "I thought I was alone, a solitary voice".

Mr. O. Smith of Wangaratta High School, mentioned the need for naturalists clubs in the far north-east, as the nearest Club was at Benalla.

Mr. Peter Turner of the Sale F.N.C. spoke of the value and beauty of the high plains, and L.V.F.N.C. Vice-president Mr. Peterson of the need for education in the value and interest of such places, while Joan Galbraith, not knowing whom she represented but knowing very well that there wasn't much time left for botanizing, didn't say much at all, (but heartily endorsed the words of the other speakers).

(North-eastern F.N.C. Cont'd).

The groups then separated, the northern visitors and members of the Sale Club going south to Grant, while we went seven miles north to Lankeys Plain - a beautiful little snow plain or alpine meadow which would normally be bright with flowers even in April, and traversed by alpine streams, but is, this season, without flowers, dry, apart from one streamlet in the lowest part, and with channels of dry mud in place of runnels. Even so, it was full of interest, with the varied leaves of alpine plants, including what appeared to be a second Victorian occurrence of Stylidium lineare, with rocky Snow Gum woodland to the west and a view over range beyond range of mountains to the south-east.

The two parties met on the homeward journey and exchanged good wishes before one group continued north and the other south.

We were especially grateful to Mrs. Webb of Denison who guided us to the high plains about 20 miles north of Dargo, and relieved Miss Rossiter of much driving so that she was free to enjoy the beauty of a part of Victoria new to all of those of us who were from the Latrobe Valley.

It was a long day, but a very happy one, and we are sure all members of our southern Clubs will wish the new Club well. It was a pity that because of very short notice more of our members did not know of the gathering.

If space and time permit, a list of plants identified on the Dargo high plains excursion will be included - otherwise it will be a part of the June issue of the Naturalist. The list is incomplete as few species were flowering and time was short, but it may serve as a basis for additions. Many birds, including emus were seen on the journey, but few (only pipits that I remember) on the high plains.

----- J. Galbraith -----

NATURE NOTES: by Mrs. Bon Thompson.

Emu Wrens. At Anderson's Track Ollie and Max observed both the male and female Emu Wrens. They stood still to watch a White-naped Honeyeater and heard the twittering in the grass. They waited as the birds moved amongst the undergrowth and then rose above it to perch on a low branch. The male has a longer tail than the female and both have bands of lighter color on their backs.

Bearded Midge-orchid. A lovely Easter surprise awaited us in the form of this orchid. We were tracking down ferns, and while returning to the road Max found the orchid. It is tiny, for although

(Cont'd over ...)

(Nature Notes Cont'd).

this one stood about 4" high the actual flower section, containing seven flowers, occupied about $\frac{3}{4}$ " on the stalk. It had no leaf. It differs from the other leek orchids we have found in that the bearded tongue, while pointed upwards when the flower opens, is irritable and falls down when an insect enters the flower. As far as we were able to observe the tongue did not again resume its upright position. It is a maroon and green orchid with three of the 'petals' slightly fringed and the tongue very heavily fringed with long hairs. Its botanical name is Prasophyllum morrisii, and we found it along the Callignee Road.

Fieldia. For a long time we have looked for these bells on treefern trunks and over the last month have found many. They are lovely cream bells about the size of Correa, and one plant in full bloom found flowering on a rocky surface above a water pool was truly delightful. In a deep gully we observed the Spinobill working over these flowers. The berries are about $\frac{1}{2}$ " long, white, fat and succulent, and as the only one we have found was well hidden under drooping treefern fronds we assume the birds, possums etc. like them.

Drinking Pool ? In the very hot weather on the side of a fern gully we found a living treefern trunk that had been chewed away on one side. We know possums like the centre of treefern trunks, and assume that through some weakness they were able to get into this one. The hollow in the centre was about 2" wide and 6" down, and 4" up from the opening. However, the surprising thing about it was that although the ground around was exceedingly dry, and the filmy ferns and other little ferns were feeling the effects of the long dry spell, this little hole was full of water, and there were plenty of signs that birds and animals had been drinking there.

----- Bon Thompson -----

SOME ITEMS OF INTEREST: by Mrs. E. Lyndon.

On March 1st., in company with members of the Sale Field Naturalists Club on their excursion into the bushlands on Valencia Creek, an unusual climbing plant was seen amongst Pandorea and Clematis in a rather inaccessible place on the high rocky creek bank. It proved to be the tough climber of East Gippsland jungles, Marsdenia rostrata, with large dark green shiny leaves. I had not expected to find it so far west, although it is known from the Mitchell Gorge.

I would be interested to hear from other naturalists of any other occurrences in this direction that may have been noted.

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(Items of Interest Cont'd).

We were taken to a waterhole near the Avon River just east of Stratford, on the way home, where amongst many pondweeds there was a little gem of the oozing mudbanks that we see but seldom, Azolla pinnata, the Ferny Azolla. The little inch-long frond is beautifully regular and has a bunch of feathery roots at the stem end. The variety more often met with is Azolla filiculoides, the Pacific Azolla. Both plants are free floating and sometimes have a reddish tint.

Seen also was Utricularia flexuosa, the Yellow Fairies Aprons, a plant I do not know at all and flatly refused to believe could possibly be related to Fairies Aprons. It is a water plant, entirely submerged, the leaves divided into fine hair-like segments and bearing numerous little floats or air bladders. It floats upright in a jar of water, and I would very much like to see it flower. Bladderwort is another common name for the Utricularias. Possibly U. flexuosa is often overlooked amongst a tangle of pondweeds.

----- Ellen Lyndon -----

A TREE CREEPER BATHING: by Marjory Burgess.

(The following is an extract from a letter to Mr. & Mrs. Lance Galbraith by their daughter Marjory, and is so interesting that it is included in the Naturalist with her permission - Ed.)

"One of the most regular visitors to our bird bath has been the white-throated tree-creeper. He waits until the flurry of thornbills has finished splashing about and then flies down to perch upright on the bank of the drive. When hopping across the flat part to the bath his body is almost parallel to the ground, but his head and white throat are lifted right up to see. On the edge of the bath he is upright again like a dignified little gentleman, but to drink he has to tip upside down, so at each sip he seems in great danger of falling in. To bathe he hops across to the stone in the bath and then jumps in backwards, tail first. A quick splash, a sideways jump to the edge and he is safe again, now so upright and pompous in his dark coat and white shirt that he would never admit to the undignified awkwardness of a moment ago.

"Once there were two tree-creeper at the bath, and one of them ran right up the two feet of smooth, vertical pipe to the tap. It would be interesting to know how the feet of this clever little bird are constructed".

----- Marjory Burgess -----

THE LARGE-billed SCRUB-WREN: by Miss Joan Galbraith.

The White-browed Scrub-Wren is one of the commonest and friendliest of our small birds, about 4½ inches long, brown, lighter beneath, and with a conspicuous white eyebrow and small wing markings.

The slightly larger Large-billed Scrub-wren is described by Dr. Leach as 'very rare', and by Roy Wheeler as: "Rare - confined to the forests (rainforests) of Eastern Victoria", so it was very exciting to find one living in the garden and coming regularly to feed on coconut and cheese put on the window for the Blue Wrens.

The Large-billed Scrub-wren has a much longer beak than the common species, no white markings, a shorter tail (unless the one here is moulting), and flesh coloured legs, where those of the White-browed species are dark.

The bird has been living in my garden for about a month and comes quite confidently to the window-sill and even on to the table inside, so I can watch it from no more than a foot away. As it seems to be alone (all the other birds that frequent the garden are now in small flocks of young birds and their parents) it seems likely that it has become separated from the rest of the flock. Here it has shelter and abundant food and water, so I hope that, instead of leaving when nesting time returns, it will bring a mate to the garden. It comes to the window in the early morning and at dusk - rarely at other times, and I have not heard it make any sound.

The White-browed species is a sweet singer and has also a variety of conversational and scolding notes.

----- Joan Galbraith -----

A REPORT ON AN EXCURSION TO SALE: by Tom Moretti.

On Sunday 31st. March a small band of bird-watchers led by the Club authority, Frank Jones, travelled to Sale with a first stop at Lake Guthridge where weather conditions were boisterous. There was the usual variety of bird life - black swans being the most graceful, but if numbers counted for anything the little coots held their own by far, the only apparent stranger to the scene being an egret (E. Elberta).

The eastern swamp hens looked attractive with the blue-black sheen of their feathers and the red nostrils, but they seemed to prefer their own company to ours as they were content to strut the grass paddocks and rest on the reeds.

We noted Black Swans, Silver Gulls, Coots, Eastern Swamp Hens, Black Cormorants, Dusky Moor Hen, Egret, Black Duck, White and Straw-necked Ibises. There were Spur-winged Plovers, White-faced Heron, Grey

Teal and Crested Grebe. This Grebe merits mention, because it gave us a demonstration of home duties with an immature Grebe claiming its attention. The young bird would swim alongside the adult which would dive and bring up food from under the water, which the youngster would promptly claim.

From Lake Guthridge we travelled to the Sale Common and walked to the Canal through grass which reached a height of two feet, making progress difficult. Here the birds were similar to those seen at the Lake - we inspected a nesting box on a red gum tree, but there was no evidence of it having been used this season. We noted a pair of Black-shouldered Kites and Black-faced Cuckoo-shrikes, and perhaps the first sighting of two or three pairs of Golden-headed Fantail-warblers. There were Yellow-tailed Thornbills, the Grey Fantail and the Grey Thrush.

One of the Black-shouldered Kites gracefully hovered for some minutes and then dropped like a stone to pick up what appeared to be a mouse in the grass. From the evidence of scratching and burrowing around the roots of grasses there was probably quite a collection of small creatures which provided food for such birds as the Kites.

On the way back to the road we found a skeleton at the base of a red gum tree which posed a problem as to the animal it represented. It was not that of a cat because the foot structure with the claws indicated a possum, and the fur to be seen along the tail section served to confirm the finding that it was, in fact, the skeleton of a possum.

A return to the road and the cars, a 'cuppa' together with a discussion on the days sightings, and members then went upon their respective homeward ways.

----- Tom Moretti -----

TWO BOOKS RECEIVED BY THE EDITOR:

Nikolai Apollonovich BAIKOV. Biographical outline and bibliography by V.N. Jernakov. Published by the Department of Russian Language and Literature, University of Melbourne.

Baikov was a Russian - a soldier, a naturalist and a prolific writer, as is indicated by the extensive bibliography. Mr. Jernakov is, of course, a well known member of the L.V.F.N.C., and a former associate at Harbin, Manchuria, of naturalist Baikov.

Plants Harmful to Man In Australia. By D.F. Francis and R.V. Scott, and published as Miscellaneous Bulletin No. 1, Botanic Garden, Adelaide. The chapter on 'Harmful Fungi' is of particular topical interest.

----- G.T. Scanlan -----

LATROBE VALLEY FIELD NATURALISTS CLUB.

YALLOURN. VICTORIA.

- Honorary Secretary: Mr. S. Belgraver, 179 Lloyd Street, Moe.
- Meetings: General Meetings are held on the fourth
Friday of each month at the Yallourn State
School commencing at 7.30 p.m..
- Excursions: Usually on the Saturday or Sunday following
the general meeting.
- The programme of events for the year may be
obtained from the Secretary.
- 'The Naturalist' 'The Latrobe Valley Naturalist' is the offi-
cial publication of the Club.
Contributions on any aspect of natural his-
tory are invited.
-

WARRAGUL FIELD NATURALISTS CLUB.

WARRAGUL. VICTORIA.

- Honorary Secretary: Mr. Jack Brooks, P.O. Box No. 120, Warragul.
- Meetings: Are held on the third Friday of each month
at the Albert Street State School, beginning
at 8 p.m.
- Excursions: Are held as arranged, usually two weeks after
the general meeting for the month.
-

TRARALGON FIELD NATURALISTS CLUB.

TRARALGON. VICTORIA.

- Honorary Secretary: Dr. D.W. Collins, 4 Charles Street, Traralgon.
- Meetings: Are held on the second Friday of each month
at the Grey Street State School, starting at
7.30 p.m..
- Excursions: Are arranged for the Sunday following the
General Meeting.

All the Clubs welcome visitors at General Meetings and on the
excursions.

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LATROBE VALLEY FIELD NATURALISTS CLUB.

YALLOURN. VICTORIA.

Dear Fellow Field Naturalists,

General Meeting Friday 28th. June : Mr. Ian McDonald, Forestry Officer, S.E.C., Yallourn, is to give a talk on: 'S.E.C. Policy on Forests and Reserves.'

As usual, the meeting will be held at the Yallourn State School, and should commence at 7.30 p.m..

Excursion Saturday 29th. June : Mr. McDonald will take members to one or more of the areas controlled by the S.E.C. in order to illustrate some of the subject matter of his talk the previous night. This is to be a half day excursion, and details will be announced at the general meeting on the Friday night.

Report of the Executive Meeting held at the home of Mr. & Mrs. Jim Peterson, Morwell, on the 5th. June:

Reservation of the Pool on Anderson's Track: It was reported that was still under consideration.

Club Library: The Club has the nucleus of a Natural History Library, which is situated at the Yallourn State School, under the care and control of Mrs. H. Crane. A catalogue will be available as soon as possible, of the contents, when it is hoped that members will make use of the books, periodicals and other in the library. Perhaps members may have books which they would be pleased to donate to the Library.

An Orchid Find: Mrs. Bon Thompson reported having found *Pterostylis fishii*, near Cockrane Road, among the pines on A.P.M. property.

New Members: Membership of the L.V.F.N.C. has grown steadily over the years, and it was reported at the Executive Meeting that Mr. & Mrs. F.O. Webb and family of three children had become members. They live at Denison, via Heyfield, and quite naturally find it difficult to attend meetings and excursions regularly. They are not strangers to Club activities however, and it is hoped that circumstances will permit them to take a much more active part in the future.

Conservation Society on Phillip Island: Miss Jean Galbraith reported that a Conservation Society had been formed on Phillip Island, with Mr. Jack Osborne, of Cowes, as Honorary Secretary. The L.V.F.N.C. will, of course, do anything possible to help this new body achieve its aims.

(Continued Over ...)

(Executive Meeting Notes Cont'd)

Proposed Reservation of the Old Woodside Road: Miss Galbraith stated that the Alberton Shire Council at Yarram was taking action in an endeavour to have reserved the Old Woodside Road, because of the variety of orchids in particular that it contained. The old road has much of historical interest in addition to its botanical treasures.

Next Meeting of the Executive Committee: This will be held at the home of Miss Jean Galbraith at Tyers, On Wednesday 3rd. July, commencing at 7.30 p.m..

Warragul Field Naturalists Club Notes:

The June Meeting of the Warragul Club will be held on the third Friday as usual, and the subject for the meeting is to be 'Fungi'. Mr. Brooks has contacted Mrs. Ellen Lyndon of Leongatha, and arranged for her to attend as Guest Speaker. She will help members to learn more about fungi, and specimens from members will be welcome for discussion and identification.

At the last meeting of the Club Committee a recommendation was made and adopted by the general meeting as follows: "Any member who is unfinancial at the June Meeting will cease to receive copies of the Latrobe Valley Naturalist".

This decision became necessary because it was felt that the cost of the publication should not be provided to other than members who were financial.

----- Chas. Hill -----
Publicity Officer.

NATURE NOTES: by Mrs. Ellen Lyndon.

Owlet Nightjar: Further to Mrs. Thompson's note on the Owlet Nightjar (Naturalist, May 1968), we handled a bird for the first time in the north-east of Victoria at Christmas. There was a deeply eroded watercourse near the camp which we usually managed to patrol daily to watch Rainbow Birds, Sacred Kingfishers, Bottle Swallows and other species either feeding young or making nests. One morning the body of a Nightjar, freshly dead but being rapidly stripped by big red meat ants, lay on the stream bed. The skull was bare and we were amazed at the size of the eye sockets, which were as big as cent pieces. Although the beak was small the gape was wide, in fact one could truthfully say that the whole head opens as if hinged at the back. It was a strange little creature, much smaller than we expected from the pictures which had been our

(Continued Over ...)

(Nature Notes Cont'd).

only knowledge of it. Beautifully camouflaged in grey-speckled soft plumage. We were told to knock on trees with likely hollows and the Nightjars, if present, would pop out and alight on the ground. We are still tree-tapping !

Wattlebirds Hawking: Back in 1950, when living in the hills near Boolarra, we had a Tree Lucerne (*Cytisus*) flowering in the garden. Red Wattlebirds squabbled all day amongst the blossoms. Coming up the hill to the house at dusk one warm evening I saw against the skyline a flock of fairly large birds hawking swiftly and silently, except for the clacking of beaks, into a great swarm of flying insects. They swooped like Swifts, but frequently alighted on the fence posts before launching themselves into the air again. I was considerably surprised to find that they were the Red Wattlebirds. I have never heard or seen reference to this habit in these birds before or since, nor have I known them to do it again, until a contributor to this month's Victorian Naturalist described a similar happening at Balwyn. I wonder if any other Gippslander has seen such a thing?

Swamp Lily: On March 24th. of this year, in company with several other Club Members we visited that interesting timbered region on the upper reaches of the Tyers River, north of Yallourn. At one of the river crossings there were drifts of delicate white water lilies floating amongst coppery oval leaves near the river's edge. As usual, my 'proper authorities' had been left in the car and I could only guess at the identity of this beauty, which, of course, was Ottelia ovalifolia, the Swamp Lily. The flowers look like big white butterflies resting on the water. The three petals form a deep cup, centred with yellow stamens. It grows in the mud of shallow streams and ponds throughout Australia, but apparently goes unnoticed when not in flower, as the leaves could be confused with those of other pondweeds. This is a native well worthy of a place in the ponds of our parks and gardens.

Water Hyacinth: Quite a stir was caused in Sale recently when the Water Hyacinth, Eichornia crassipes, was noticed in a 'Sale shop' (my information is from the local paper) and was confiscated by the Lands Department. This is a highly noxious plant from tropical Sth. America which, when introduced into suitable environments, will choke all waterways with masses of fibrous roots and foliage. It reproduces vegetatively and can spread like wildfire.

When I was very young and living in the Sale district, my mother, in common with most other garden-loving farmer's wives, exchanged plants with neighbours and friends all over the country. Amongst her treasures was a tub of the pretty blue Water Hyacinth with the cute green bladders under the leaves. I cannot remember what its ultimate fate was, but I have never seen the plant in a wild state then or later, and we lived quite close to the Latrobe River. I can only conclude that the climate so far south discourages the growth of this tropical menace.

TRARALGON FIELD NATURALISTS CLUB NOTES: by Graham Marshall.

On Sunday February 11th., our convoy travelled to Inverloch and then on to the Flat Rocks at Eagles Nest, where we met up with our fellow South Gippsland Field Naturalists.

The tide had ebbed and we were able to inspect the rock pools. Much time was spent overturning the rocks and replacing them as found to prevent the unnecessary destruction of sea life. Most specimens came into the classification of Invertebrates, that is, animals without backbones. In addition to this, there were specimens of Vertebrates, namely, animals with backbones, which were represented by several species of fish.

To describe the creatures observed, it would be best presented by listing the specimens in their respective Phyla by beginning with the simplest and proceeding to the higher classifications. In the Phylum Platyhelminthes, we saw Flatworms on the undersides of the rocks. In similar situations, we saw Segmented Worms, belonging to the Phylum Annelida (Annelid, from the Latin derivation *anulus*, meaning 'ring'). The interior partitioning of such creatures show rings on the exterior of the body - hence the name Annelids. The species we observed had built up a camouflaged, protective layer of shale around its body on the underside of a rock and submerged in a pool. At times we observed the tentacles fully spread, sweeping through the sea water and sifting for food.

The next Phylum represented was the Coelenterata (hollow-gut). Specimens observed were both the Red and Green Anemones. They too, like the Annelids, have tentacles, but they also have stinging capsules to paralyse their prey.

In the Phylum Arthropoda (jointed legs), we observed a Hermit Crab, Crabs and Barnacles. The Phylum Echinodermata (hedgehog skin), was represented by Green Biscuit Stars, Brittle Stars as well as several other species of Starfishes.

By far the most type of creatures observed belonged in the Phylum Mollusca (soft-bodied). To cover these, the easiest way is to list the species by their common names, and refer readers to 'Marine Molluscs of Victoria' written by McPherson and Gabriel, for further descriptions and illustrations. From memory the specimens were:- Chiton, Red Ear Shell, Duckbill (Elephant Fish is frequently used), Limpets, Imbricated Pearl Shell, Choice Seaweed Shell, Kelp Shells, Turban Shell, Painted Lady, Pheasant Shell, Black Nerite, Sand Snail, Screw Shell, Wentletrap, Brown and Ribbed Cowries, Half-Grained Helmet, Lineated Corrinella, Margined Ancilla and Dog Winkle. (Many others could be listed for the area, but those listed above can be found specifically on the Flat Rocks).

(Continued over ...)

(Traralgon F.N.C. Notes Cont'd).

After dinner, we were led to Cape Patterson, where we saw the cutting made down to the sea for the rail line to load ships with coal for the lime pits at Walkerville. Later we observed two volcanic plugs on the rocks, and a volcanic intrusion on the cliff face. We were also rewarded by finding a large specimen of a petrified tree trunk.

On the homeward journey we visited a wildflower sanctuary at the Sink Hole. The area is fenced off around the Sink Hole through the resourcefulness of Miss Wadell and Mrs. Lyndon. Briefly, the Sink Hole is the result of a sea cave subsiding to leave a huge cavity in the surface on the area above the cliff face. The subsidence is now regenerated with typical coastal flora.

All present experienced a most enjoyable day. Our members were enriched by the companionship and local knowledge of our South Gippsland friends.

----- Graham Marshall -----

THE GOLDEN BROWN BUTTERFLIES OF SOUTH-EASTERN AUSTRALIA:
(And especially of Gippsland and the Victorian Dividing Range). by
C.G.L. Gooding.

These lovely Butterflies, Sub-Family Satyrinae, contain all the rich golden brown species with numerous ocelli (eye-like spots), and various black markings which so enliven our forest lands, hillsides and fern gullies. The headquarters of the family is south-eastern Australia, with the greater number of species in Gippsland, and the mountain valleys and peaks of the main Victorian Dividing Range.

There are also interesting species in south Western Australia, and in Tasmania, where some unique, and archaic species are to be found. These lovely butterflies always begin to appear in late Spring, through Summer and Autumn, and are a never ending pleasure to Naturalists on outings through the bushland and fern gullies. The larva of all of them (with one exception) feed upon various native grasses, feeding in the early part of the night and hiding during the day time. The larva are green, rarely some shade of brown, and when found in the day time always appear sluggish, but become active as night approaches, when they begin to feed on the blades of the grasses.

The pupa of most of the species is a very beautiful object, and is generally suspended from the food plant, but in some species it is loose and found under sticks or in a frail network beside stones or at the roots of herbage. The pupa is not hard to find by an experienced Naturalist at the proper season for the species concerned.

(Continued over ...)

(The Golden Brown Butterflies Cont'd).

The butterflies of the Satyrinae sub-Family are mostly of medium size, but many small, dainty and beautiful species are found, both in Australia and in other countries. One of the chief characteristics of them is that they have one or more of the principal veins very much swollen near the base of their wings, the one exception being that of the genus Melanitis, a fine large showy species which is found from about Port Macquarie to Cape York. There is a most beautiful pattern of silver-white bands, and spots, with other marks on the underside of the hindwing, as well as ocelli on both wings, those on the underside being artistically ringed - on a number of the species. They are shade loving insects, but can often be seen visiting flowers and sipping the nectar. When the eucalypts are in heavy blossom, I have often seen and watched hundreds of Satyrinae of several species feeding on the nectar.

They mostly frequent long grass, undergrowth, wooded gullies and dense forest, but most of them in very hot weather prefer cool shady places. Their flight is irregular and weak, and this is designed to give them added protection from birds of prey. This irregular flight has, however, a very disconcerting effect on both the bird of prey and the collector.

Satyrinae butterflies are very regular at the time of their appearance - indeed they are so very much so that it is almost possible to tell the time of the month from the first butterflies seen in the season. Most of the species are single brooded, but a few, like the genus Tisiphone, Argynnis and Melanitis are double brooded.

The colours of the undersides of many species are so beautifully variegated and tinted that when they settle on the ground amongst debris and dead leaves, it is almost impossible to see them. Nature has endowed them with wonderful camouflage which they are very quick to use to the best possible advantage.

Species of the sub-Family Satyrinae are found all over the world, but are much more abundant at the higher altitudes, and are more numerous in individuals and species in temperate regions than in the tropics. South-eastern Australia (especially Gippsland) is very rich in species - this region has quite a number of very fine ones, some of which are quite rare, and have to be searched for very diligently, several fine species being found only on the highest mountain ranges.

Heteronympha solandri, the Great Golden Heteronympha, is one species in particular that is found only at an altitude of from 4,000 to 5,000 feet. There are also several species of the genus Driexenia, very showy little butterflies, which are to be found at a similar elevation during Summer and Autumn. The species of south-eastern Australia are unique and showy, and have no relatives anywhere else in the world. They do however show some affinity to butterflies of the south of South America, and this shows that they are very old, and of archaic origin, possessing a great and most interesting antiquity.

(Continued over ...)

(The Golden Brown Butterflies Cont'd).

The eggs of our Satyrinae are sometimes very beautiful, being usually of various shades of green, roughly spherical with a flattened base, and are finely and delicately ribbed. The young larva, on hatching, are green and hairy with large black heads, but as they grow to maturity quickly assume the characteristics of the true Satyrinae, but most of them still retain their green colour. The heads provide very good characteristics for the separation of the different species, they are easily reared in captivity on any good soft native grass - they all feed at night and hide during the day.

One of the species of Satyrinae (Tisiphone abeona), is one of the most remarkable butterflies in the world - it ranges from the Maroochy River In Queensland right through coastal Eastern Australia, down through Wilson's Promontory to Mount Gambier in South Australia. Throughout its wide range it has produced eight well defined sub-species, some of which are extremely beautiful. It is somewhat difficult to convince overseas entomologists that all these eight are but one species. The Gippsland sub-species is Tisiphone abeona albifascia. Much has been written about the sub-Family Satyrinae by the late Dr. G.A. Waterhouse, who successfully paired and crossed all these races through several generations, many thousands of specimens being involved. The story is too long to deal with here. It can be studied in papers written in 'The Proceedings of the Linnean Society of N.S.W. 1922 - 1923' and in 'The Australian Zoologist, 1928'.

As the life history of all the races is the same, a brief description here of one race is sufficient. The egg is green or Bluish green, nearly spherical and slightly roughened, the young larva is green and has a shining black head with paler longitudinal lines, and covered with minute white dots and very short white hair. The pupa is bright green with wing cases outlined in bright yellow, and suspended head downwards by the cremaster. The food plant of the larva is Gahnia psittacorum, one of the Sword Grass plants.

During my long experience of over 50 years in the bush as a Naturalist I have often studied butterfly behaviour. This is most essential for it is only by watching the butterflies at play - chasing each other through the shafts of sunlight that filter down from the high eucalypts, that we can obtain an adequate appreciation of the habits and other characteristics of the many species. While watching the butterflies at play from a good vantage point I have often recalled the beautiful lines from Haworth by Scudder: -

"Marck while he moves amid the sunny beam,
O'er his soft wings the varying lustres gleam.
Launched into air, on purple plumes he soars,
Gay Nature's face with wanton glance explores;
Proud of his varying beauties, wings his way,
And spoils the fairest flowers, himself more fair than they."

PLANTS OF THE DARGO HIGH PLAINS: Provided by Miss Jean Galbraith. (Seen during about 2 hours on 6th. April 1968).

<i>Polystichum proliferum</i>	Mother Shield-fern
<i>Lycopodium fastigatum</i>	Clubmoss
<i>Podocarpus lawrencii</i>	Mountain Plum-pine
<i>Carpina</i> sp. ?	
<i>Poa australis</i> (prob. var. <i>alpina</i>)	Snow Grass
<i>Calorophus lateriflorus</i>	
<i>Scirpus</i> sp. ?	
<i>Juncus polyanthemos</i>	
<i>Pterostylis</i> sp. ? (prob. <i>decurva</i> , leaves only)	Greenhood
<i>Grevillea australis</i>	Alpine Grevillea
<i>Stellaria pungens</i>	Prickly Star-wort
<i>Scleranthus diander</i>	Tufted Knawel
<i>Ranunculus lappaceus</i>	Buttercup
" <i>muelleri</i>	Felted Buttercup
<i>Caltha intraloba</i> (fruit)	Alpine Marsh-marigold
<i>Drimys xerophila</i>	Alpine Pepper
<i>Crassula</i> sp. ? (prob. <i>C. macrantha</i> , no flowers)	Stoncrop
<i>Acaena anserinifolia</i> (fruit)	Bidgee-widgee
<i>Oxylobium alpestre</i>	Mountain Shaggy-pea
<i>Pultanea</i> (prob. <i>P. muelleri</i>) no flowers.	Bush-pea
<i>Hovea longifolia</i> (fruit) Alpine form	Long-leaf Hovea
<i>Viola hederacea</i>	Ivy-leaf Violet
" <i>betonicifolia</i>	Purple Violet
<i>Eucalyptus stellulata</i>	Black Salloo
" <i>pauciflora</i>	Snow Gum
" <i>rubida</i> or <i>E. viminalis</i> (prob. former)	Candlebark or Ribbon Gum
<i>Kunzea muelleri</i>	Yellow Kunzea
<i>Callistemon sieberi</i>	Alpine Bottlebrush
<i>Baeckea utilis</i>	Mountain Heath-myrtle
<i>Epilobium</i> (prob. <i>E. confertifolium</i> , no flowers)	Willow-herb
<i>Haloragis micrantha</i> or <i>depressa</i> (no flowers)	Raspwort
<i>Platysace humilis</i>	Alpine Platysace
<i>Hydrocotyle ciliata</i> (prob. <i>H. podunculata</i>)	Pennywort
<i>Oreomyrrhis ciliata</i> (characteristic daffodil scented leaves)	Fragrant Carraway
<i>O.</i> sp. ? (prob. <i>O. eriopoda</i>)	Carraway
<i>Aciphylla glacialis</i> (2 clumps only)	Snow Aciphyll
<i>Leucopogon hookeri</i> (fruit)	Mountain Beard-heath
<i>Pentachondra pumila</i>	Dwarf Heath. (dying because of the drought)

(Plants of the Dargo High Plains Cont'd.)

<i>Epacris paludosa</i>	Swamp Heath
" <i>serpyllifolia</i>	Thyme Heath
" <i>microphylla</i>	Coral Heath
<i>Richia continentis</i>	Mountain Richea
<i>Centaureum pulchellum</i>	Centaury
<i>Prunella vulgaris</i>	Self-heal
* <i>Prostanthera cuneata</i>	Alpine Mint-bush
<i>Grafiolaoeruviana</i>	Brooklime
<i>Euphrasia</i> sp. ? (no leaves)	Myebright
<i>Plantago tasmanica</i>	Tasman Plantain
<i>Asperula</i> (prob. <i>A. gunnii</i>)	Woodruff
<i>Pratia</i> sp. ?	Pratia
<i>Velleia montana</i>	Mountain Velleia
<i>Stylidium graminifolium</i>	Trigger-plant
" <i>lineare</i>	Narrow-leaved Trigger-plant (so far as one tell without flowers)
<i>Olearia phlogopappa</i> sp. ? (prob. var. <i>subrepanda</i>)	
<i>Calmisia longifolia</i>	Silver Daisy (only two plants seen)
<i>Brachycome scapiformis</i>	Coarse Daisy
<i>Craspedia unifolia</i>	Billy-buttons
* <i>Cotula alpina</i>	Mountain Cotula
<i>Gnaphalium</i> sp. ? (prob. <i>G. argenteifolium</i>)	Cudweed
* <i>Helipterum anthemoides</i>	Mayweed Sunray
* <i>Senecio laetus</i>	Variable Groundsel

Marked * = a few flowers. No species not so marked in flower at all.

----- Jean Galbraith -----

"A VOICE CRYING IN THE WILDERNESS" A Conservation Creed by Peter Scott.

What man did to the Dodo, and has since been doing to the Blue Whale and about 1,000 other kinds of animals, may or may not be morally ^{wrong}. But the conservation of nature is most important because of what nature does for man.

I believe something goes wrong with man when he cuts himself off from the natural world.

Man does not live by bread alone. I believe he should take just as great pains to look after the natural treasures which inspire

(Continued over ...)

(A Conservation Creed - Cont'd)

him as he does to preserve his man-made treasures in art galleries and museums. This is a responsibility we have to future generations, just as we are responsible for the safeguarding of Westminster Abbey or the Mona Lisa.

It has been argued that if the human population of the world continues to increase at its present rate, there will be no room for either wildlife or wild places, so why waste time, effort and money trying to conserve them now? But I believe that sooner or later man will learn to limit his own over-population. Then he will become much more widely concerned with optimum rather than maximum, quality rather than quantity, and will rediscover the need within himself for contact with wilderness and wild nature.

No one can tell when this will happen. I am concerned that when it does, breeding stocks of wild animals and plants should still exist, preserved perhaps mainly in nature reserves and national parks, even in zoos and botanical gardens, from which to repopulate the natural environment man will then wish to recreate and rehabilitate.

These are my reasons for believing passionately in the conservation of nature.

All this calls for action of three kinds: more research in ecology, the setting aside of more land as effectively inviolate strongholds, and above all education. By calling attention to the plight of the world's wildlife, and by encouraging people to enrich their lives by the enjoyment of nature, it may be possible to accelerate both the change in outlook and the necessary action.

Much money is needed for relieving human suffering, but some is also needed for human fulfilment and inspiration. Conservation, like education and art, claims some proportion of the money we give to help others, including the as yet unborn.

The community chest which seeks to make the gallery representative and maintains the fire-alarm system is The World Wildlife Fund.

(With acknowledgments to 'Victoria's Resources' Vol. 10. No. 1., March-May 1968 - included as the Editorial for the issue).

WOMBAT KEEPS SCALP: Brian Williams in the 'Age' 23/5/68.

"Poor Willie Wombat had a few anxious moments at yesterday's conference of the Victorian Dairy Farmers Association. Quite a few delegates to the conference were literally after his scalp ... "

There was an attempt made for an approach to the Government to restore the bounty for wombat scalps. The move was defeated and so Willie Wombat has to face the threat mainly only of the indiscriminate shooter.

(Ed.)

Latrobe Valley Naturalist.

LATROBE VALLEY FIELD NATURALISTS CLUB.

YALLOURN. VICTORIA.

- Honorary Secretary: Mr. S. Belgraver, 179 Lloyd Street, Moe.
- Meetings: General Meetings are held on the fourth Friday of each month at the Yallourn State School commencing at 7.30 p.m..
- Excursions: Usually on the Saturday or Sunday following the general meeting.
- The programme of events for the year may be obtained from the Secretary.
- 'The Naturalist' 'The Latrobe Valley Naturalist' is the official publication of the Club. Contributions on any aspect of natural history are invited.
-

WARRAGUL FIELD NATURALISTS CLUB.

WARRAGUL. VICTORIA.

- Honorary Secretary: Mr. Jack Brooks, P.O. Box No. 120, Warragul.
- Meetings: Are held on the third Friday of each month at the Albert Street State School, beginning at 8 p.m.
- Excursions: Are held as arranged, usually two weeks after the general meeting for the month.
-

TRARALGON FIELD NATURALISTS CLUB.

TRARALGON. VICTORIA.

- Honorary Secretary: Dr. D.W. Collins, 4 Charles Street, Traralgon.
- Meetings: Are held on the second Friday of each month at the Grey Street State School, starting at 7.30 p.m..
- Excursions: Are arranged for the Sunday following the General Meeting.

All the Clubs welcome visitors at General Meetings and on the excursions.

ISSUE No. 55.

JULY, 1968



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Latrobe Valley Field Naturalists Club.

YALLOURN. VICTORIA.

Dear Fellow Field Naturalists,

General Meeting Friday 26th. July: Mr. D. G. Chalmers will introduce the subject "Geology of the Latrobe Valley". Mr. Chalmers will be remembered as the instructor of the Natural History classes held recently in Yallourn.

Members please note that for this lecture the meeting will be held at YALLOURN HIGH SCHOOL.

For persons who do not know Yallourn, the HIGH SCHOOL is situated on a block bordered by Latrobe Avenue, Strzelocki Road, Outlook Road and Maryvale Road.

Excursion Saturday 27th. July: will be led by Mr. Chalmers. Members to meet at Yallourn Post Office at 10am.

Report of the Executive Meeting held at the home of Miss J. Galbraith, Tyers, on the 3rd. July.

Andersons Track: Miss Galbraith will endeavour to approach the authorities concerning reserving area near the pool.

National Trust. The Gippsland Branch of the National Trust will be officially launched on Friday 26th (our meeting night). Our club is most interested in the formation of this Branch and our senior vice president, Mr. Peterson, will represent our club. A letter of support and best wishes will be sent to the new Branch.

Darlimurle. Mrs. Frankenberg, the secretary of the Mammal Survey group of the F.N.C.V. informed that the results of their survey in the Darlimurle district will be published in the next issue of the Victorian Naturalist.

She also advised that the list of plants of this district, as compiled by Mrs. Lyndon and that of birds by Mr. Jones, should be submitted to the editor of the "Victorian Naturalist" for publication.

Both Mrs. Lyndon and Mr. Jones gave their permission and the secretary will forward the copies through Miss Galbraith to the editor.

Next Meeting of the Executive Committee: This will be held at the home of Miss Rossiter, Railway Avenue, Yallourn, on Wednesday 31st. July, commencing at 7.30p.m.

CORRECTION. In the list of Dargo plants in the June Naturalist occurs Platysace humilis which should be Trachymene humilis.

So far as I know there is no such plant as Platysace humilis except in my bad memory. Apologies to all readers.

Joan Galbraith.

Note on Traralgon Excursion. by Mrs. Ellen Lyndon.

I would like to see more reports of the activities and discoveries made by our sister clubs in Gippsland for we can all learn something from each other.

Four parties of Herrona and Leongatha folk "gate crashed" the Traralgon F.H.C. excursion to Inverloch in February and a very enjoyable day it was, in the usual perfect beach weather that this summer has afforded us.

It is always pleasant to meet people of similar interests and there were plenty of active children to search out the weird and wonderful things that lurk under the rocks below tide level.

In the Latrobe Valley Naturalist of July 1967 there are excellent accounts of the marine life on our shore platforms and there is no need for me to repeat the names of the plants and animals we examined except for one that is something of a rarity on our beaches.

A small boy turned up something that looked like a shapeless mass of green and brown brains, rather a "goocy" thing we thought at the time, not knowing what it was.

A search of Dakin's Australian Seashores (a wonderful handbook for beach combers, with plenty of illustrations) showed the creature to be one of the free swimming Anemones, Phlyctenactis tuberculosa. When returned to the water it assumed the typical anemone shape.

Once identified it can be recognised by the numerous little bladder like bulges that cover its surface. The wall of this anemone is thin and not at all jelly-like and the hollow vesicles communicate with the central cavity.

Ellen Lyndon.

THE NATURALIST.

The editor Mr. George Scanlan has been unable to assist in publication of the Naturalist this month.

This edition has been put together by a band of willing helpers from the L.V.F.H.C.

I am sure all readers would wish Mr. Scanlan good health in the future and look forward to his comments in future issues of the Naturalist.

I would like to thank all who have assisted with the printing of this issue.

Lorna Padfield.

A Newly Described Wattle. by Miss Jean Galbraith.

We have known for some years that a wattle found, among other places, in the Baw Baw foothills, was to be described as a new species by Dr. Tindale of Sydney Herbarium.

This species which grows all around the turnoff from Thompson Valley Rd. to Mt. Erica (old Ezards No 1. mill site) has the large bluish phyllodes of another well known wattle which has long been confused with Acacia penninervis in Victoria. This is A. falciformis which has foliage rather like A. penninervis, with the same marginal gland joined to the midrib by a slanting vein.

In an article in Contributions from the N.S.W. Herbarium (Vol 4, No 2,) Dr. Mary Tindale describes the new species as A. obliquinervia tindale and points out that true A. penninervis has not been found in Victoria.

In discussing the new species she gives the distinctions between the three closely related species thus (the following is merely a summary of those points needed for recognition.)

No hairs on peduncle, nerve from gland to midrib, pod fawn

A. penninervis.

No hairs on peduncle, no nerve from gland, pod bluish,

A. obliquinervia,

Golden hairs on peduncle, nerve from gland, pod bluish,

A. falciformis.

Locally the new species may be found in most forests at or above 2000ft. (sometimes lower) while A. falciformis grows in the sandy country along Old Callignee Rd, Traralgon South.

A. penninervis is a tree of Queensland, and northern and central N.S.W.

If it is ever found in Victoria the Snowy and Suggan Buggan areas are the most likely.

There are a number of N.S.W. mountain species enter Victoria.

Jean Galbraith

NATURE NOTES

by Mrs. Bon Thompson.

Lyrebirds.

Up Traralgon Creek Road at Yerang Park, there are three lyrebirds - two male and one female. They are digging up the small flat at the side of the road. The birds leave the flat and leisurely walk into the undergrowth as a car passes. The last six times we have passed this spot we have seen the birds. We hope they are nesting there but have not investigated for fear of disturbing them.

Pterostylis Fishii.

Another patch of the rare greenhood, Pterostylis Fishii, has been found in the vicinity of the others. In the pine plantation there is a gully about a chain wide that was cleared but not planted in pines. Right on the edge of the pines, in this gully of natural scrub, grow two lovely patches of P. Fishii. In one patch there were at least 20 flowers. It was a wonderful sight, thanks to Max.

Bon Thompson.

ADVENTURE ON THE MIRBOO LINE.

by Mrs. E. Lyndon.

Certain Leongatha members of the club have long promised themselves and each other a jaunt per rail car from Boolarra to Mirboo North, there being a more or less unknown section of the country between these townships that cannot conveniently be explored any other way. It would, of course, make a wonderful walk, preferably in the spring, commencing say, from the uphill end. In the fleeting hours of sunshine on June 1st the first ambition was realised. One of the motor cars was parked at Mirboo North, well stocked with necessities for the hour long lunch break, later, at this terminus.

Boolarra station stands amid the remnants of a manmade forest of mixed conifers, deciduous trees, local bluegums and messmates.

There are several splendid Californian Redwoods in the township and in the station yard. A particularly fine one used to grace the railway platform itself, but for some reason, certainly not pressure of rail traffic, it has been removed in its prime.

When they chose those little Redwoods the early planters possibly did not realise that they were dealing with the traditional rivals, in stature, of our big Mountain Ash. Boolarra is notable, too, for its avenue of native Blackwoods, probably unique in Victoria. They are past their prime now, and I, for one, would be happy to see them replanted.

The single rail line snaked away, in a straight line, toward Morwell, and the youthful members of the party waxed enthusiastic as the doisel came cantering in. The line follows roughly the course of the river, the Little Morwell, here little more than a drain for farm land.

Hop Bitter-pea and Indigo gave promise of blossom in spring along the railway cutting. In a paddock by the line a patch of enormous Boletus toadstools sent everyone plunging to the side windows, a manoeuvre that would certainly wrecked a Sydney ferry. We walked back to them later and marvelled at their size, noted that they grew in improved pasture, and yes, in Swamp Gum terrain. Their color and shape suggested new saddlery, complete with nice yellow lining; one could imagine a pony club had called in and unsaddled for lunch, carelessly dumping their leatherware about the ground.

Soon the train began to climb and we entered the bush, rather pathetic bush it is today, with piles of pulpwood stacked among the thin cover of the remaining trees. Between rail and river a long narrow strip of farm land runs, disappointingly, all the way up to Darlimurla, with the rising land on the other side more or less denuded.

We were more than half a century too late to see the beauty of the Mirboo line, first opened for traffic in 1866.

Hooting merrily through Darlimurla we noticed a familiar caravan parked near the Big Tree, reminding us that colorful anklets will be fashionable among the local honeyeaters this spring.

(continued over) . . .

Adventure on the Mirboo line contd.

The run from there into Mirboo North proved more interesting than the earlier section. A shallow gully, packed with Coral Fern and the feathery plumes of Tassel Cord-rush, ran beside us, and once a Wallaby sprang up and hopped away. The adjoining land was well furnished with shrubbery and should be worth investigating later in the year. All too soon we were running out into the cleared pine lands with the head of our gully a blackened wilderness.

A spell of bright sunshine decided us on lunching down in the Baths Reserve, at Mirboo North, beside another gully sheltered with Scented Paperbarks where massed King Ferns, Coral Fern and several Blechnums struggle valiantly against the tide of suburban housing and the proximity of people. The Tassel Rush once grew luxuriantly round the pools and up to a dozen orchids have been listed for the area before it was isolated.

All aboard for the return journey, there was a scramble for the front window seats that afforded a motorist's view of the tunnel - like cutting, overhung with shrubbery, that rushes downhill past the show-ground. The introduced Gorse has hitch-hiked along the line and is to be seen growing in several places, but it does not seem to have spread seriously here as it has in some districts. So addicted to train travel had the party now become that the journey was continued into Morwell, again by a stretch of country not seen from the main roads. It is a very pleasant way to spend a winter Saturday afternoon.

Ellen Lyndon.

AN INTERESTING FUNGUS.

Sometimes when fungi hunting in the bush, especially in sand country, we may pick up dry fronds of bracken fern decorated round the edges of the leaflets with what looks like bobble fringe, scaled down to fairy size.

These minute "toadstools" are the spore capsules of one of the more lowly fungi known as Myxomycetes, or Slime Moulds.

This particular one is named Didymium squamulosum. The fruiting bodies are more or less globular and are mounted on a short broad stalk, the columella. Under the microscope they are seen to be covered with starry clusters of calcium carbonate. They are not an uncommon fungus but being so tiny they often pass unnoticed on the forest floor, where they play their part in breaking down the decaying plant debris.

Ellen Lyndon.

NEW SPECIES AND NEW NAMES.

In Muelleria, the publication of the National Herbarium, Vol.1.No.3,1967. many new species and unavoidable name changes appear. It is not possible to list them all, but ones that affect Gippsland plants likely to be seen by members of our club are mentioned.

Hovea rosmarinifolia A.cunn. Until recently this was known as H. longifolia forma aspera, but earlier it had been described as H. rosmarinifolia and in future will be known by that name.

This is the Hovea which grows above the road between the Thompson River and Walhalla.

H.longifolia R.Br. Var. montana J.H.Willis is the dark richly purple shrub with small broad leaves, of many mountain tops.

Baeckea gunniana Schauer, and a broader leaved but otherwise similar Baeckea have been familiar to all of us who are interested in the Mt. BawBaw plants. The broad leaf plant was known as B. gunniana Schauer var. latifolia Benth. Mr. Willis has pointed out that there are three, not two, closely related plants on Baw Baw, B.gunniana with tiny concave leaves, B. utilis Miq. with longer leaves (up to 10cm flat above,keeled below, and the broad-leaf form which is a variety not of B.gunniana but of B.utilis.

It now becomes B.utilis Miq. var. latifolia J.H.Willis.

Parsonsia brownii is now the name of the Twining Silk Pod, as lyonsia (its old name), is not now considered distinct from the genus Parsonsia.

Helichrysum acuminatum DC. has long been confused with H. bracteatum Andr. The latter is a tall branched golden everlasting growing from sea level to mountainsides, but not alpine. H. acuminatum is not tall and is unbranched, always alpine.

Apalochlamys spectabilis J.H.Willis has long been known as Cassinia spectabilis Labill. It is the tall aromatic biennial plant with very large downy leaves, which many of us saw on the edge of a saltmarsh on the outskirts of the Lakes National Park during a club excursion in 1966. It is so very different from all species of Cassinia that it is satisfactory to know it is given the status it deserves.

Calomeria amaranthoides Vent. is as unlike all other species of Eumecia (it was previously H. elegans) as Apalochlamys is unlike all species of Cassinia. It is the tall plumed iridescent biennial with fragrant leaves, which we know as Incense Plant and have admired on the Bruthen roadside.

In addition to these name changes affecting plants we often see, there are four new species which have an especial personal interest for us.

(continued over)

New species and New names contd.

Banksia canei J.H. Willis is named after its discoverer Mr. Cane of Maffra, well known to many of us. Those taking part in the Wulgulmerang excursion will remember seeing it, like a prickly leaved Silver Banksia, but with velvety cones while those of the commoner species are smooth.

Oleocaria allenderae J.H. Willis was named after our friend Miss Allender, Excursion secretary of F.H.C.V. who discovered it 2 miles north of Darby River.

Helichrysum rogersianum J.H. Willis was named in honour of our fellow member and friend Keith Rogers of Wulgulmerang who first collected it at Brumby Point, N.E. Humniong Plateau.

Monotoca rotundifolia J.H. Willis is another new species discovered by Mr. Rogers at Brumby Point.

Jean Galbraith.

BOOK REVIEW.

I have just enjoyed reading Bertha S. Dodge's book "Plants that changed the World." This book shows the debt we owe to some botanists and plant collectors, while telling of their courage, persistence and adventures.

It commences with a chapter on Sir Joseph Banks and the problems he overcame with the Breadfruit. Next is the search, collection and secrets of the plants that produce quinine.

Then follows the long search for the plant that cures leprosy and the problems of procuring seeds and plants to establish the first rubber plantations outside Brazil.

The story of manilla rope and the difficulties, of over approximately 100 years, before it was grown outside the Phillipines and how this plantation in Panama saved the world from a rope shortage during the last world war.

The history of the discovery and use of wax bearing plants tells of the patience of, and dangers faced by, Henry Wickham. Finally the secret of the poison used on arrows in South America, how it was obtained and how it is literally a life-saving material in the cure of spastic paralysis, is truly fascinating.

This is a book of the history of some important plants and it holds the readers interest to the end.

Bon Thompson.

CENSUS OF NATIVE FLORA IN GORRIEDALE RESERVE.

Acacia botrycephala	Sunshine Jattle
A. diffusa	Spreading "
A. melanoxydon	Blackwood
Acianthus exortus	Gnat Orchid
Acrotriche prostrata	Honey-pots
Amperea xiphioloba	Broom Spurge
Astroloma humifusum	Cranberry Heath
Billardiera scandens	Apploberry
Brunonia australis	Pincushions
Bossiaea cinerea	Showy Bossiaea
Brachycome scapiformis	Coarse Daisy
Burchardia umbellata	Milkmaids
Caladonia carneae	Pink Fingers
Cassinia aculeata	Dogwood
C. " longifolia	Shiny Cassinia
Casuarina sp ?	Sheeko
Chiloglottis reflexa	Autumn Bird Orchid
Comesperma volubile	Love Creeper
Correa reflexa	Correa
Corybas	Helmet Orchid
Centaurium pulchellum	Austral Centaury
Dianella revolta	Spreading Flax lily
Daviesia latifolia	Hop Bitter-pea
Dillwynia glaberrima	Hoathy Parrot-pea
Drosera auriculata	Sundew
Epacris impressa	Common Heath - pink and white
Eriochilus cucullata	Parson's Bands
Eucalyptus consideniana	Prickly Stringybark
E. " globoides	White "
Gahnia radula	Brickmakers' Sedge
Glossodia major	Waxlip
Gnaphalium involueratum	Common Cudweed
Gompholobium huegelli	Karralla
G. " latifolium	Broad Wedge- pea
Grevillea chrysophaea	Golden Grevillea
Hardenbergia violacea	Sarsparilla
Helichrysum scorpioides	Curling Everlasting
Hibbertia stricta	Direct Guinea Flower
Hypericum gramineum	Little St. John's Wort
Haloragis tetragyna	Raspwort
Hovea heterophylla	Hovea
Kennedya prostrata	Running postman
Leptospermum myrsinoides	Silk Tea - tree
L. " scoparium	Manuka
Leucopogon virgatus	Common Beard Heath

(continued over

Census of Gormandale Reserve cont.

Lomandra filiformis	Wattle Matrush
L " longifolia	Spiny -headed Matrush
Lomatia ilicifolia	Holly Lomatia
Olearia myrsinoides	Silky Daisy -bush
Persoonia juniperina	Prickly Geebung
Pimblea humilis	Dwarf Ricoflower
Platylobium formosum	Handsome Flat - pea
P " obtusangulum	Common "
Scaevola ramosissima	Hairy Fan - flower
Senecio luteus	Firewood
Senecio sp. ?	Firewood without ray florets
Stackhousia monogyna	Candles
Stylidium graminifolium	Grass Trigger - plant
Tetratheca pilosa	Pink Bell
Thelymitra grandiflora	Great Sun - orchid
T. " pauciflora	Slender "
T. " rubra	Salmon "
Thysanotus patersonii	Twining Fringe -lily
Tricoryne elatior	Yellow Autumn - lily
Viola hederacea	Ivy -leafed Violet
Villarsia exaltata	Yellow Marsh - flower
Wahlenbergia sp. ?	Bluebell
Xanthorrhoea minor	Small Grass - tree
Xanthosia dissecta	Cut - leaf Xanthosia

NOTE

Because some of the plants were not flowering at the times when we were at the reserve we were not able to identify the species although the family could be recognised by the leaves.
We will try to identify these this year.

Bon Thompson.

I think we should say thankyou to the entire Thompson family for the time which has been spent in the Gormandale reserve.
All club members will find this census valuable next time they make a visit to the area. L.P.

Warragul Field Naturalist Club Notes.

The July meeting will be held on the third Friday as usual and will be the commencing night for a series of short Botany Classes conducted by Mr. C. Fisher.

Members wishing to learn the fundamentals of this ever popular subject "Botany" should not fail to attend our next three of four meetings.

The main part of the evening will be taken up by a talk from our secretary Mr. Jack Brooks who has chosen for his subject the "Physiography of West Gippsland".

Chas. Hill.
Publicity Officer.

Report of Excursion held Saturday June 29th.

This was led by Mr. I. McDonald, Regional Forest Officer of the S.E.C. Area of excursion were the S.E.C. reserves in the areas controlled by the S.E.C.

The first reserve visited was Witt's Gully Dam Reserve of 150 acres, also included in this reserve is 20 acres of land owned by Mr. Cuthbertson.

Next stop was the Sayers Trigg Point reserve of 50 acres. Here we saw Pink Heath in flower, and were all aware of what this whole area would have been in bygone days.

We then travelled along McDonald's Track to Yallourn and to The Yallourn Storage Dam which has 200 - 300 acres of shore area reserve. Here we saw evidence of tree planting to help beautify the shore line.

From here we journeyed along various roads to the waterlily reserve of 30 acres. There was another reserve within the works area, but we did not visit this one.

On the way home the party travelled through some rugged country surrounding the Tyers River Gorge.

Despite the cold windy weather the 14 members present declared it a very interesting and informative excursion.

Mr. J. Peterson moved a vote of thanks to Mr. McDonald.

These notes were compiled by Mrs. B. Thompson, who has also written a summary of the talk given by Mr. McDonald at the meeting of the L.V.F.N.C. This will appear in a later edition of the Naturalist.

LATROBE VALLEY FIELD NATURALISTS CLUB.

YALLOURN. VICTORIA.

Honorary Secretary: Mr. S. Belgraver, 179 Lloyd Street, Moe.

Meetings: General Meetings are held on the fourth
Friday of each month at the Yallourn State
School commencing at 7.30 p.m..

Excursions: Usually on the Saturday or Sunday following
the general meeting.

The programme of events for the year may be
obtained from the Secretary.

'The Naturalist' 'The Latrobe Valley Naturalist' is the offi-
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Contributions on any aspect of natural his-
tory are invited.

WARRAGUL FIELD NATURALISTS CLUB.

WARRAGUL. VICTORIA.

Honorary Secretary: Mr. Jack Brooks, P.O. Box No. 120, Warragul.

Meetings: Are held on the third Friday of each month
at the Albert Street State School, beginning
at 8 p.m.

Excursions: Are held as arranged, usually two weeks after
the general meeting for the month.

TRARALGON FIELD NATURALISTS CLUB.

TRARALGON. VICTORIA.

Honorary Secretary: Dr. D.W. Collins, 4 Charles Street, Traralgon.

Meetings: Are held on the second Friday of each month
at the Grey Street State School, starting at
7.30 p.m..

Excursions: Are arranged for the Sunday following the
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All the Clubs welcome visitors at General Meetings and on the
excursions.

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LATROBE VALLEY FIELD NATURALIST CLUB.

YALLOURN. VICTORIA.

Dear Fellow Field Naturalists,

General Meeting Friday 23rd. August: This is to take the form of a film night, with selected films on subjects of natural history. The films should be of interest to all members, and it is hoped that those members who are not taking advantage of school holidays will attend, together with as many friends as possible.

The place of the meeting is, as usual, the Yallourn Primary School and the time of commencement 7.30 p.m..

Excursions: The Excursion Secretary, Miss N.T. Rossiter has provided the following information regarding the August excursion, as well as the mid-month excursion on the 15th. September.

Saturday 24th. August: Mr. & Mrs. O. Thompson will lead members to inspect immature and mature pine forests in order to observe the effect of the plantations on the growth of native plants in competition with the pines. The meeting place will be the Traralgon High School at the corner of Gormandale Road and Liddiard Street. Time of meeting 10.30 a.m..

Sunday 15th. September: This is to be a half-day excursion and Mr. Graham Marshall will lead a combined party of members of the Latrobe Valley and Traralgon Field Naturalist Clubs to the Rosedale South flower reserve where it is expected there will be a colorful and varied display of wildflowers. This excursion will provide an opportunity for members of both Clubs to meet each other.

The meeting place will be near the railway line at Racecourse Road, Rosedale at 2 p.m.. Members should proceed along the Princes Highway to the 'T' junction at the end of the Rosedale shopping centre, then turn right and continue to the railway crossing.

Executive Meeting: This was held at the home of Miss N.T. Rossiter on Wednesday 31st. July. Among the matters discussed were :-

'The Naturalist'. As it is now time to arrange for the printing of covers for the Club publication for another period, various suggested alterations were discussed, without any finality, and a further meeting is to be held at Miss Rossiter's home on Wednesday 14th. August at 7.30 p.m. in order to be able to make a recommendation to members at the general meeting.

Film titles were selected for the next general meeting from the State Film Centre catalogue and a letter from the Department of Crown Lands and Survey regarding the creation of a flora reserve in the vicinity of Anderson's Track was read and received awaiting further reports.

THE NEWLY DESCRIBED WATTLE : by Keith Rogers:

In the July issue of the 'Latrobe Valley Naturalist', it was interesting to read Miss Jean Galbraith's report on the recent naming by Dr. Tindale of Acacia obliquinervia tindale. It was also most helpful to have certain botanical differences given between this wattle and the closely related A. falciformis, common in Gippsland, and A. penninervis of New South Wales.

In this Wulgulmerang tableland area, and on the higher ranges to the west, both the local species of the A. penninervis group are extremely abundant, and it is pleasing to now have their correct classification.

On the higher ranges of this part of East Gippsland, particularly at altitudes of 4000 to 4500 feet, there are extensive areas in which the newly described wattle is the dominating shrub. At a casual glance it is often very similar in appearance to the eucalypt undergrowth of the usual open montane forest such as one meets with around Rocky Plain.

In its local form this wattle is a shrub of six or eight feet, sometimes more, and has lightish green phyllodes, frequently about 3 to 4 inches long by one inch wide. This is in contrast to the tall growth and larger dark green or bluish phyllodes of the form on the Baw Baw foothills, as mentioned by Miss Galbraith.

The conspicuous flowers of this wattle are bright gold in fairly large heads, and come out in early to late October according to altitude, and about the same time as the Silver Wattle (A. dealbata) when growing with it. It has wide, flat, bluish seed pods. Away from the higher altitudes this wattle also occasionally appears on the eastern margins of the plateau, around the heads of the gorges that break off towards the Snowy River. The height there would be around 2000 feet.

Another form of apparently the same wattle occurs in New South Wales along the road from Jindabyne to Kosciusko. There the light-green phyllodes are much longer and narrower and very curved. This narrow phyllode form of A. obliquinervis also grows in one or two spots not far south of the Cobbera Mountains. The same wattle is also plentiful on the north-eastern area, adjacent to the mountains. It flowers in great profusion in late October along the road approaching Falls Creek from the Mount Beauty side.

The local form of Acacia falciformis grows around the paddocks at Black Mountain, and particularly along the scarp of the tableland that overlooks Suggan Buggan and up to an altitude of around 3500 feet. It is often quite a tall, straight tree of 50 or 60 feet or more, with very dark, rough bark, and bearing large, dull green phyllodes of up to 8" x 1½", usually only slightly falcate. Some of the younger trees may be shapely, with dense lustrous foliage.

(The Newly Described Wattle Cont'd)

The cream coloured flower heads are very large, and come out in late Spring or early Summer and about the same time as the Black Wattle (A. mearnsii). The bluish pods are wide and strap-like, and the seeds large. It takes more than 12 months for them to ripen.

Acacia falciformis, in its various forms, is much more widespread than A. obliquinervis, in Gippsland, as it flourishes from the mountains to the coast. It has an interesting variant on the limestones of Buchan, and at Toorloo Arm of Lake Tyers. There it is a tree having quite short blue-grey phyllodes, but the flowers and pods appear the same as with the typical form.

Now that we know that the true A. penninervis is only listed for New South Wales, it will be of interest to follow up Miss Galbraith's suggestion, and search for it in the valley of the Snowy River and its tributaries.

Perhaps some day one might meet up with other Club members doing just that !

----- Keith Rogers -----

Errata: Corrections by Mrs. Lyndon.

I must apologise to readers for two errors appearing in recent issues of the 'Latrobe Valley Naturalist'. The first, in Issue No. 52 of April 1968, Page 8. Speaking of Kingfishers.- In the fourth line it should read: "the junction of the Thomson River and the Canal" instead of: "the junction of the Latrobe River and the Canal". The Latrobe and the Thomson Rivers meet further downstream at the Swing Bridge.

And the second.- In Issue No. 55, July 1968, page 4, "Adventure on the Mirboo Line, 4th. paragraph and last line. Date given for this line opening should have been 1886 and not 1866.

----- Ellen Lyndon -----

The probably typographical error regarding the date of the opening of the railway to Mirboo also brought a prompt note from our Boronia member and friend Reg. Stephens to Mrs. Padfield, who, among others of the members brought out the July issue. Mr. Stephens wrote: "I am sure that the typographical error on Page 4 of the L.V. Naturalist' July 1968, would make the editor 'sit up'. I would have no doubt that many others would know that the Mirboo end of the line was opened in 1886 and not 1866." Chas. Daley, in his 'The story of Gippsland' wrote that the railway line to Boolarra was opened on the 10th. April 1885, and to North Mirboo on the 7th. January 1886.

(Editor)

A NEW BREED OF HONEYEATERS ? by Ellen Lyndon.

This Winter I have been putting out syrup for the Honeyeaters, and the White-ears, the Spinebills and the Red Wattle-birds have been taking full advantage of this strange quince tree that produces goblets of nectar in its off season. But the most enthusiastic sweet sippers of them all are the Sparrows. They come in droves and sit around the honey pots dipping their finches' bills in blissful enjoyment, to the great exasperation of the Spinebills.

Is this a common habit in Sparrows ? And if members please, how can we convince them that they are seed-eaters and not honey eaters at all ? ? They are setting such a bad example to the other garden birds like the Goldfinches, Magpies and Starlings.

----- Ellen Lyndon -----

A FURTHER NOTE REGARDING THE MORWELL - MIRBOO RAILWAY: by Mrs. L. Padfield.

It has been stated by the authorities that the railway from Morwell to Mirboo (and stations in between) will cease to operate as from the 7th. September 1968, and be replaced by a bus service. Members may then be content to walk along sections of the track and see some of the treasures that abound.

----- Lorna Padfield -----

BIRD VISITORS: by Jean Galbraith.

Different seasons bring different birds to specific localities. I have already mentioned the Large-billed Scrub-Wren who visited this garden in Autumn. It apparently left after about six weeks. One morning, during the last week in May, two more spectacular birds arrived - a pair of Eastern Shrike-tits. They are not rare birds, but are sufficiently uncommon here not to have been seen in the garden before. Indeed, I have seen them only twice in the district, though the bird-watchers in our Club have seen them more often and even found nests. The two bright birds, green-backed, golden-breasted with a stiffly erect black and white crest, bathed in the bird bath - looked at the bird table and nectar bottle, without taking food, and were not seen again.

The same afternoon a female White-winged Triller visited the bird bath. Trillers occasionally nest in the district, and a pair spent last Spring near Traralgon, but it is at least 10 years since I have seen one at Tyers.

----- Jean Galbraith -----

ANNUAL BIRD-BANDING REPORT 1967/68: by F.E. Jones.

The number of birds banded by the Latrobe Valley Field Naturalists bird-banding group during the past twelve months is much lower than in the previous two years. This is due partly to the drought and also to the fact that, as the project system was started in the bird-banding scheme towards the end of 1966, this is the first full year in which (apart from 19 Flame Robins) our banding has been restricted to Honeyeaters. This year has been an off year for both red Ironbark (*E. sideroxylon*) and Red Box (*E. polyanthemos*) in our banding areas, and this too has tended to reduce the number of birds banded. 347 birds were banded and there were 47 retraps.

The most interesting of the retraps was a White-naped Honey-eater banded at Stoney Creek near Cowarr, and retrapped 10 miles west 9½ months later at Flourbag Creek, near Bruntons Bridge. This is the first bird we have retrapped away from the place where it was banded. Also during the past years two of our bands have been returned by members of the public. One, a Kookaburra 090-72033 was found dead at Newry, and the other, a Pied Currawong 090-72027, was killed by a falling tree in Boola forest. Although both these were recovered quite close to where they were banded, it is gratifying to know that people will return the bands when they find them.

As will be seen on the list, the number of species is down to 10, and the total is less than 1/3 of the number last year, however, some useful evidence was gained of the way bird life is affected by the seasonal conditions and the variations of the flowering of the Eucalypts and Banksias. The amount of data that has accrued from a little over three years of banding is starting to be of some value, and when further study of field notes, books, band schedules, and re-trap schedules can be done the project may, I hope, be carried on in a more scientific manner. Even a quick look through the records reveals interesting possibilities.

In contrast to the banding, our nest recording efforts were much better last season, 66 nest record cards being completed. 39 were compiled by Mrs. J. Jphnstone and Mrs. E. Collins (most interestingly and carefully done), and 27 by myself.

The return of species banded is shown on the following page.

---- F.E. Jones ----

(Annual Bird-Banding Report Cont'd)RETURN OF SPECIES BANDED.1/7/67 - 30/6/68.

<u>Species.</u>	<u>Total Banded.</u>
Flame Robin.	19
White-naped Honey-eater.	38
Brown-headed Honey-eater.	21
Eastern Spinebill.	61
Lewin Honey-eater.	1.
Yellow-faced Honey-eater.	22
White-eared Honey-eater.	3
Yellow-tufted Honey-eater.	52
Crescent Honey-eater.	35
New-holland Honey-eater.	95
	<u>347</u>
	=====

THE STATE ELECTRICITY COMMISSION AND POLICY IN RELATION TO
FOREST CLEARING AND LAND DEVELOPMENT:

A report by Mrs. Bon Thompson of a talk by Mr. Ian McDonald, Regional Forestry Officer, S.E.C., at the June general meeting of the Club.

Mr. I. McDonald, Regional Forestry Officer of the S.E.C., explained the reasons for the S.E.C. entering upon a land clearing and development project. Firstly he explained the nature of the fire complex of the forests of the Latrobe Valley from a time before and since the advent of man into the area. The fires cleared the forest floor and created conditions suitable for regrowth. Much of the regrowth was eaten by the native animals which followed the fires, and the animals were followed by the aborigines, who in turn caused fires to be lit in their pursuit of the animals. Fires in the forest areas became more frequent and intensive in their effect on the entry of the white man to the country.

Mr. McDonald traced the history of fires in the area from about 1930 onwards, and showed by means of slides how fire fighting equipment developed from a few knapsacks and wet bags to the very efficient equipment possessed by the S.E.C. now. He stated that a fire in the then open-cut in 1944 caused damage to the extent of about \$2,000,000 - a fire in similar circumstances today would result in damage in the region of 100 million dollars.

(Continued over ...)

(S.E.C. Forestry Policy Cont'd).

After the 1944 fires, fire prevention measures and equipment were greatly improved, and in the early 1950's began the extensive formation of access roads through the forest areas. By 1956, 110 miles of these roads or tracks, and 50 water dams had been completed. However, one of the effects of fewer serious fires and clearing of large areas of forest lands was a destruction of native animal habitat, and this in turn meant the growth of denser scrub.

Following fires during 1957, the Commission experimented with helicopters, foam equipment, and the newly designed 800 gallon tank units. But subsequent fires in 1962 at the back of Yallourn North showed how hopeless it was to halt fires of a major nature in timbered areas, although at that time there were 40 tankers and 400 men available for fire fighting. Coal dust fall-out in a radius of about three miles from coal winning operations added to the intensity of fires in the forests. These and other factors indicated a need for clearing large areas of timber and creating grasslands in order to provide a reduction in the damage by fire in the area surrounding the open cuts and the buildings and other property of the Commission.

Mr. McDonald explained that the S.E.C. had not indulged in indiscriminate clearing of forest lands, and that the large areas necessarily cleared, about 2,000 acres each year from 1959, contained about 20% of reserves in the form of gullies, steep hills where erosion could have been serious if all vegetation cover was removed and the trees and other growth in such areas were retained, and also that shelter belts were also provided. The Latrobe Valley contained about one million acres, and the areas cleared by the S.E.C. for fire prevention purposes totalled only about 20,000 acres.

----- Bon Thompson -----

REMNANT OF A GIPPSLAND FERN GULLY: by Ellen Lyndon.

There are roadworks in progress this winter at the junction of the Thorpdale road with the Mountain Hut road. The soil in the area is richly red and it doesn't take much imagination to picture the 'glue pots' that were experienced by the early settlers in their sledging days in the Gippsland Hills. A creekbed gully divides the rising timbered land from the cultivated potato paddocks to the south, and downstream, in the sharp angle formed by the two road embankments, the remnant of a wonderful fernery still survives.

Scented Paperbarks form a close thicket, very old specimens, I should think, with robust trunks reaching up some twenty-five

(Remnant of a Gippsland Fern Gully Cont'd)

feet to the light. Clinging to the rough bark and climbing right up to the thin canopy above are the green feathery billows of Scrambling Coral Fern, so lush and rounded and mounded that to lose ones footing and fall into it is like plunging into a feather bed. In the wet years this portion of the gully has always been treacherously boggy, and this probably accounts for its survival in the corner of a grazing paddock. In the drought of the long summer just past the ground was merely damp and springy, and the road workers began on the realignments, taking a great scoop out of the fernery that previously rolled right up to the road edge.

There occasional Silver Wattles, Blackwoods and Swamp Gums in the melaleuca thicket which runs parallel with the Thorpdale road for a few hundred yards, thinning out where tongues of higher land run into it lower down. There are some nice specimens of the King Fern; an odd Rough Tree-fern; some Batwing Fern and Hard Water-fern, with lots of venerable Fishbone Water-fern on trunks to two feet high. Not an impressive list perhaps, but forming a pocket of rich greenery such as is becoming all too rare in our local hill forests today. On the day of my visit a young Tiger Snake lay sunning itself on a pile of dry sticks, in a beautifully patterned coil the size of a saucer. It remained quite motionless, but with the head raised alertly from the centre.

I had visions of approaching the owner of this corner as it is well situated in the angle of the roads and could be easily fenced off. Judge of my disappointment when I came on an embankment newly thrown across the entire gully, no doubt dooming the contents to slow drowning in a water catchment.

Across the Mountain Hut road on the upper side, the gully looks dense but it is actually only thin and uninteresting scrub with few ferns of any sort. I conclude that this part has at some time been burned clean, while the lower side, watered by springs, has escaped all fire. In this upper gully, within a short distance of the noisy machinery working on the road, I surprised a Lyrebird scratching about in the dry leaf mould.

The plants referred to above, in order of mention, are:-

Melaleuca squarrosa
Gleichenia microphylla
Acacia dealbata
Acacia melanoxylon
Eucalyptus ovata

Todea barbara
Cyathea australis
Histiopteris incisa
Blechnum procerum
Blechnum nudum

REPORT OF THE GEOLOGICAL EXCURSION ON 27TH JULY.Reported by Mrs. Lorna Padfield.

The excursion was led by Mr. D.G. Chalmers who had talked to members on the previous night on the Geology of the Latrobe Valley.

The weather was that which we have become to accept as good 'field nats' weather, and the party was first led by Mr. Chalmers to the lookout on Coach Road hilltop which overlooks Yallourn and a considerable part of the Latrobe Valley. The shape of this part of the valley could be seen and it was explained that it had been formed by faulting and subsidence resulting in a graben or trough. Mr. Chalmers pointed out the Yarragon Fault and parts of the Yallourn Monocline which was also referred to as the Haunted Hills Fault.

Then to an area which was reached along the old Pump House Road on the Latrobe River. We scrambled down the slope to the river and were shown the Mesozoic conglomerate which consisted of pebbles and boulders cemented together in a mass. Also seen associated with the conglomerate were Silurian Sandstones.

At a spot opposite the Yallourn Power Stations, on the top side of the road cutting we were shown the different strata of rock material which had been laid down so many millions of years ago. Along the road, through Yallourn North and onto the Mobile Quarry, and to the site of the quarry workings. A stack of rock had been left standing in the quarry and here were found specimens of Vesicular Basalt, which contained the vesicles or holes formed by steam in the molten lava as it quickly cooled on or near the surface of the earth. Zeolites were found in the basalt, which was overlying a sedimentary rock formation.

The party continued back to the highway, and turned at Tyers onto the old Tyers - Walhalla Road, as far as the turn-off to W3 track. Some of the members walked to the old quarry where some plant fossils, including ferns were found in the mudstones and siltstones. Returning to the cars the route was taken along the other branch of W3 track to the site of the old kilns and the quarry of Tyers Limestones, which were situated on the east branch of the Tyers River.

Here the limestone quarry face formed cliffs of from 40 to 50 feet, which, it was explained were the beds of limestone, laid down in a horizontal bed, had been tipped into a vertical position by the tremendous earth movements of long past periods.

The Siluro-Devonian limestone is fossiliferous, and included many remains of corals, crinoids, brachiopods, trilobites, and many others. Fossils were also found in the mudstones below the roadway, and this last area of searching was followed by thanks to Mr. Chalmers and a return along the roads to home.

Latrobe Valley Field Naturalists Club.

- Honorary Secretary: Mr. S. Belgraver, 179 Lloyd Street, Moc.
- Meetings: The general meetings are held on the fourth Friday of each month at the Yallourn Primary School, at 7.30 p.m.
- Excursions: Usually on the Saturday or Sunday after the General meeting, as shown on the programme of events for the year.
-

Warragul Field Naturalist Club.

- Honorary Secretary: Mr. Jack Brooks, Box No. 120, Warragul
- Meetings: Are held on the third Friday of each month at the Albert Street State School, beginning at 8 p.m..
- Excursions: Are held as arranged, usually two weeks after the monthly general meeting.
-

Traralgon Field Naturalist Club.

- Honorary Secretary: Dr. D.W. Collins, 4 Charles Street, Traralgon.
- Meetings: Are held on the second Friday of each month at the Gray Street School, starting at 7.30 p.m..
- Excursions: These are arranged usually for the Sunday following the general meeting.

All of the Clubs welcome visitors to their General Meetings
and Excursions.

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SEPTEMBER, 1968



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LATROBE VALLEY FIELD NATURALISTS CLUB:

YALLOURN. VICTORIA.

Dear Fellow Field Naturalists,

General Meeting Friday 27th. September 1968: The subject for the September meeting is to be 'The Invertebrates' and the speaker Mr. Nebois, Curator of Insects at the Victorian National Museum. The subject is one of great interest to all naturalists and Mr. Nebois (it goes without saying) an expert on the subject - this will be another interesting and profitable lecture.

Excursion Saturday 28th. September: Details of the excursion were still to be finalised at this writing, and members will be advised as soon as possible after the arrangements for the object and locality have been decided upon.

Report of the Meeting of the Executive Committee held at the home of Mr. & Mrs. O. Thompson at Koornalla on the 28th. August:

Alterations to the Naturalist: It has been decided and confirmed by members at the last general meeting that the present cover of the Naturalist shall be continued for twelve months, and that in the meantime a new cover incorporating the emblem of the Club, the Flying Duck Orchid, will be devised.

Proposed Latrobe Valley Festival 1970: A request was received from the organising Committee for a 1970 Latrobe Valley Festival for a representative to attend a meeting of this Club Executive, and an invitation is to be forwarded suggesting that this be at the next Executive Committee Meeting (on 2nd. October).

Proposed Lower Glenelg National Park: Negotiations for the creation of a National Park in the Lower Glenelg River area (in the south-western corner of Victoria) have been proceeding for a considerable time, and a request has now been received from the Committee working for the Park for the support of the L.V.F.N.C. in representations to the appropriate authority. The Executive decided to give Club support to what is a very worthwhile project.

Resignation of the Club Treasurer: The Treasurer, Mr. E. McElroy intimated that he wished to resign from the position of Treasurer which he has carried on for some time. His resignation was accepted with regret, and Mrs. Lorna Padfield has undertaken to perform the duties pro tem.

New Books Available Through The Club: It was reported that the following books may be bought through the Club, and suggested that members interested should place their orders with the Secretary at the next general meeting;-

1. Victorian Wattles by F.J.C. Rogers.
2. Wildflowers of Victoria in colour.

(Continued over ...)

(Executive Report Cont'd ...

Acacia obliquinerva: This Acacia was described by Miss Jean Galbraith in the July issue of the Naturalist, and referred to by Mr. Keith Rogers of Wulgulmerang in the August issue. A specimen was found along the Blackwarry Road during 1967, but was not identified and named until May of this year. Mr. Rogers, the author of 'Victorian Wattles' and a member of the Ringwood F.N.C. referred to the latter finding in a letter to the Committee.

Executive Committee Meeting Nights: It was decided that the Executive should meet on the Wednesday night following the General meeting of members, even though the meeting night may be in the same month as the general meeting. The next Executive Committee meeting is to be on Wednesday the 2nd. October at the home of Mr. & Mrs. E. McEltor, 35 Latrobe Road, Morwell.

----- L. Padfield -----

LATTICE FUNGI: by Mrs. Bon Thompson.

This year we have found many varieties of fungi, and among them is the white Lattice fungi. It is composed of small tubes formed into a circular lattice arrangement. Mrs. Lyndon informs us that it originally comes from a thin-skinned puffball which bursts as the lattice reaches maturity. Sometimes the lattice is forced away from the puffball by the force of the bursting. However, the puffball decomposes very quickly leaving the lattice free to be blown around by the wind. The small tubes contain a fluid in which are many spores. A microscope is necessary in order to see the spores as they are so very tiny. I suppose that as the tube decomposes or is broken the fluid escapes, and so the spores are scattered.

AMONG THE PINES:

During the recent cold weather we have been exploring among the pine plantations, mainly because it is much warmer there, and have found many varieties and colors of fungi. The fine Coral fungi is very prolific. We found also several Orchids, and those we found among the pines included the Gnat Orchid (Acianthus exertus), which grows very tall and the flowers, while being pale in color, are quite large; the Mosquito Orchid (Acianthus reniformis) but only the leaves were found as the time was yet too early; the Autumn Bird Orchid (Chiloglottis reflexa) which were growing very prolifically judging from the number of leaves, although we have been able to find only a few flowers; Parson's Bands (Eriochilus cucullatus) which had flowered and seeded; also some Greenhood leaves which we think are almost certainly Pterostylis fishii right under the pines in Cochran's Lane; Pterostylis nutans, the Nodding Greenhood, which flowered quite well. The Common Appleberry (Billardiera scandens) does not grow as

(Continued over ...)

(Among the Pines Cont'd ...)

big a creeper as usual but flowers, while the trailing Ground berry, Acrotriche prostrata, and some of the sundews have been found growing quite well although we have not found them in flower yet. If there is an area of excess dampness the pines do not seem to grow and you may come upon a little glade with many mosses, lichens and low plants like Pennywort and wild Violäts. The Common Maidenhair Fern will grow very well under pines providing it has enough moisture - it is usually found in the gullies.

These observations have been made under the pines close to Traralgon South and amongst the more mature trees. Mrs. Lyndon's article in the Naturalist of August 1967 is about the pines in the Longford area.

----- Bon Thompson -----

A BOOK REVIEW: by H.J. de S. Disney.

'Australian Birds' by Robin Hill. The review of Robin Hill's recent book is taken from 'Australian Natural History', the authoritative natural history magazine published for the Australian Museum in Sydney. The reference is from Vol. 16 No. 2, June 1968. The review is printed here in full, with due acknowledgement to the reviewer and the Natural History Magazine publishers.

"After the tremendous publicity given this book it is with sadness that one finds that, as regards accuracy, it is no better than the books to which the author refers when he says " ... even the best books readily available are rather poorly illustrated". Many of the plates are inaccurate, with wrong colours of the beaks and eyes, wrong numbers of wing feathers, and wrong proportions.

In the plate of the Golden Bower-bird on pages 160 - 161 there are far too many secondaries and secondary coverts shown, and the reviewer knows of no bird in the world with a single coloured feather on the crown as shown. The yellow on the crown is actually formed by normal-shaped yellow crown feathers forming a yellow area at the back of the crown. The illustration of the bower is also wrong. There should be a horizontal branch or stick across between the walls, on which the bird displays. The walls themselves are shown incorrectly; they are not upright, as in the avenue builders, but are formed of a maypole of sticks criss-crossed on top of each other.

On page 171 the female Grey-crowned Babbler is shown differing from the male in having a fawn and not a whitish throat, when in fact they are the same. On page 15 the Yellow-faced Cormorants are shown with black and not yellow faces. The Lewin Honeyeater on page 223 is shown with bright-blue ear patch instead of dark grey in front of yellow. On page 93 the tail of the Red-tailed Cockatoo is too short and the pale bill is that of the female bird.

(Continued over ...)

(Book Review Cont'd ...

One last example of the many errors, both small and large, in the illustrations is the male Superb Lyrebird on page 139. The tail is wrongly illustrated, with the colours on the underside depicted as appearing on the upper side.

There are several cases of captions being wrong - for instance, on page 25 the adult Nankeen Heron is labelled immature. On pages 64 - 65 the captions are wrong and an attempt has been made at correction in the corrigenda on page 268, but this is still wrong. The bird on the left is a Masked Plover, the bird in the centre a Spur-winged Plover, and that on the right a Banded Plover.

The text is pleasant and easy to read but again there are errors. In the Grey-backed Silvereye on page 256 it is stated that "in the winter the flanks of these birds become a much richer, tawny buff colour than in the present summer dress". Dr A.J. Keast showed in 1958 that, although there is body moult before and after breeding, the plumage is similar, and the birds with rich tawny bluff flanks are the southern breeding birds, which migrate north in winter and mix with the local pale buff birds in the winter flocks.

There is a very useful chapter on the classification of birds at the beginning of the book, and also the Royal Ornithologists' Union's Official Checklist (1926), which has long been out of print and unobtainable, and the more recent Handlist of the Birds of South Australia (1962) by H.T. Condon.

The bibliography at the end shows that a great effort was made to consult all the available literature, but it is sad that what should have been a valuable addition to Australian Ornithology has been spoilt, apparently by being too hurriedly compiled. A book of this sort with so many errors is a nuisance to the expert, as he does not know, without checking elsewhere, what can be accepted, and the layman has no chance of finding out. Therefore the book cannot be quoted as an authority".

----- Editor -----

MID-MONTH EXCURSION NOTES: by Miss N.T. Rossiter.

There will be a mid-month excursion on Saturday 12th. October, to the Boola Boola Reserve, and members are asked to meet at the Tyers Post Office at 1.30 p.m..

----- N.T.R. -----

THE 'NATURALIST' AND COPYRIGHT: by the Editor.

The publication of even such a modest journal as the 'Naturalist' imposes an obligation to observe (among other things) the law relating to copyright. Broadly, copyright refers to a sole right to produce or reproduce all manner of things - including the publication of writings - and copyright legislation was introduced and exists to protect the author of such writings. In an English court case the judge stated that the object of copyright was: "Not to afford protection to ideas, but to the particular form of expression by which an author conveys his ideas to the world".

The position is fairly clear insofar as the Club and this work is concerned, and it is sufficient for us to follow the principle that "any fair dealing with any work for the purposes of private study, research, criticism, review or summary ... does not constitute an infringement of copyright". It is quite legitimate to quote from any written work - (provided there is not an express provision in the work that such is forbidden without approval) - for any of these purposes, but the quotation should not, as a general rule, extend to the extensive use of parts of the written works, and the source should be acknowledged. In fact, the source of references should always be acknowledged, whether or not the matter of copyright is involved.

Some periodicals encourage reproduction, such is the "Wildlife Service" published by National Parks and Wildlife Service, Sydney, which has printed on the cover "periodicals please copy and acknowledge".

In addition to the legal obligation imposed by the Copyright ^{Act} (a Commonwealth Statute), there are also ethical obligations either to request permission to copy or to acknowledge the material used. Whether or not permission should be first obtained, and the cases in which acknowledgements should be made, depends a lot upon the circumstances of individual cases. In general the source of information used and references made, the source should be noted, preferably at the end of the article contributed for publication. This helps, apart from any obligation in regard to copyright, to give authority to the content matter included.

The reason for making reference to the obligations to be observed in connection with copyright is that from time ^{to time} contributions are received for inclusion in the 'Naturalist' which sometimes consist of lengthy extracts from books and periodicals and without any indication as to the right to use the material without seeking permission of the author and/or publisher. The Editor is then required to make a sometimes invidious decision - to use or not to use, and if it is the latter the feelings of the sender may be hurt.

REPORT OF THE FIFTH ANNUAL MEETING OF THE SALE AND
District Field Naturalists' Club: Notes from President's Report.

The year has been a quiet one - there have been no significant changes in membership, and the financial position of the Club is satisfactory. There has been however, a number of interesting speakers at meetings and excursions.

The President (Mr. P. Turner) started the year with a talk on 'Rivers and their Formation', and this was followed by a geological talk by Mr. Robin Glennie of the Victorian Mines Department on 'The Tertiary Period in Victoria'.

In November Mr. & Mrs. Illidge showed slides which magnificently illustrated many of the West Australian wildflowers. It was disappointing that more people were not there to enjoy their delightful talk and slides. Mr. John Landy was the speaker for the December meeting, and he gave a 'running' commentary as he showed slides of his collection of Lepidoptera. These too were beautiful slides. At the January meeting we were treated to a showing of films, as it was not possible to find a speaker during the seasonal holiday period.

In February President Mr. P. Turner was the speaker, and his subject was 'The Origin of Flowers'. The March meeting was notable in that it took place during a strike by Electricity staff and it was due to the kindness of Mr. & Mrs. D. Fitzpatrick that we were able to have Mr. & Mrs. Lyndon of Leongatha show slides and give a talk on plants, in the Club vice-President's garden. At the April meeting Mr. A. McDonald gave a talk to members 'Conchology', which was made so much more interesting by his collection of shells which were available for inspection, and interesting slides.

Mr. Colin Chalmers, Secretary/Treasurer of the Club, spoke on 'Waterfowl Ecology' at the May meeting, and we were again favoured by Mr. & Mrs. Lyndon with a talk on 'Fungi'.

The plants in the Arboretum are now beginning to grow well, and the Club is indebted to the members who have looked after the young shrubs and trees, and kept the grass cut. It is hoped to erect a board with the Club name at the Arboretum in the near future.

Office bearers for 1968/1969 were elected as follows;

President.	Mr. P. Turner.	
Vice-President.	Mr. D. Fitzpatrick.	
	Fr. O'Kelly.	<u>All re-elected.</u>
Secty/Treas.	Mr. Colin Chalmers.	
Librarian.	Mrs. D. Fitzpatrick.	
Press Officer.	Mrs. E. Newnham.	

REPORT OF EXCURSION TO PINE PLANTATIONS: by Mrs.
Lorna Padfield. Saturday 24th. August 1968.

The excursion was led by Mr. & Mrs. O. Thompson and; probably because of the absence of so many members during the school holidays, there only four cars at the meeting place containing members.

The route was first along the Gormandale Road, and the party stopped near an area of recently planted Pinus Radiata, the Monterey Pine. Fences were negotiated and we were soon walking along the rows of trees looking for something more attractive (for us) than the introduced pines. There were the Rice Flower (Pimelia linifolia) and Hardenbergia violacea, all making a bright splash of colour. Seen also were the plants of Bossiaea sp. (?), Cranberry Heath (Astroloma humisfusum). On the opposite side of the road was a plantation of Pinus pinnata, the Cluster or Maritime Pine, which were much older than the Pinus radiata. Leaves of Orchids were seen, and these included Red Beak (Lyperanthus nigricans); the Autumn Bird Orchid (Chiloglottis reflexa), and the Waxlip (Glossodia major).

A move was then made to the Sanctuary on the Gormandale Road, and were appaled at the quantity of rubbish which had been left strewn about in the area. A much more pleasant and rewarding sight was Golden Grevillia (G. chrysophaca) in flower, and splashes of colour were provided by Correa (C. reflexa), Running Postman (Kennedyia prostrata), Hardenbergia and others. Leaves of other plants were identified and this reserve will certainly be a good place to visit later on the year, as the total identified in the area so far is 83 species of native plants.

We saw too plants of the Twiggy Guinea Flower (Hibbertia virgata), and the Showy Guinea-flower (H. linearis), Pink Beard Heath (Leucopogon ericoides), and the Handsome Flat Pea (Platylobium forosum).

After a welcome lunch we travelled through more pine plantations, wandering here and there through the trees where we continued to find specimens of natives.

Along the South Calignee Road were specimens of the Wattle Acacia falciformis, which has been described in earlier articles; and along Clarks Road we journeyed in order to see the Greenhood (P. fischii) and there were too many specimens of Pink Heath (Epicras impressa) the Victorian State floral emblem.

This field day among the pines yielded a surprising result in the number of native plants growing in the vicinity of the pines, and members, on taking their several ways home after its conclusion, were possessed of a somewhat different attitude towards the pines and their effect on the indigenous plants.

Due thanks were accorded Mr. & Mrs. O. Thompson for their excursion arrangements and leadership.

Latrobe Valley Naturalist.

LATROBE VALLEY FIELD NATURALISTS CLUB.

YALLOURN. VICTORIA.

- Honorary Secretary: Mr. S. Belgraver, 179 Lloyd Street, Moe.
- Meetings: General Meetings are held on the fourth Friday of each month at the Yallourn State School commencing at 7.30 p.m..
- Excursions: Usually on the Saturday or Sunday following the general meeting.
- The programme of events for the year may be obtained from the Secretary.
- 'The Naturalist' 'The Latrobe Valley Naturalist' is the official publication of the Club. Contributions on any aspect of natural history are invited.
-

WARRAGUL FIELD NATURALISTS CLUB.

WARRAGUL. VICTORIA.

- Honorary Secretary: Mr. Jack Brooks, P.O. Box No. 120, Warragul.
- Meetings: Are held on the third Friday of each month at the Albert Street State School, beginning at 8 p.m.
- Excursions: Are held as arranged, usually two weeks after the general meeting for the month.
-

TRARALGON FIELD NATURALISTS CLUB.

TRARALGON. VICTORIA.

- Honorary Secretary: Dr. D.W. Collins, 4 Charles Street, Traralgon.
- Meetings: Are held on the second Friday of each month at the Grey Street State School, starting at 7.30 p.m..
- Excursions: Are arranged for the Sunday following the General Meeting.

All the Clubs welcome visitors at General Meetings and on the excursions.

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OCTOBER, 1968



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Latrobe Valley Field Naturalists Club.

YALLOURN. VICTORIA.

Dear Fellow Field Naturalists,

EXCURSION NOTES: On Sunday October 27th. the Club will explore the Labertouche area, led by Mr. & Mrs. J. Brooks of the Warragul Field Naturalists Club. This is a very popular region in springtime, and those who have visited it on previous excursions will be looking forward to seeing many lovely wildflowers.

It is suggested that members meet at the Labertouche Road turn-off (about a mile beyond Picnic Point) from the Princes Highway, at 10 a.m.. From there the party will go north to Forest Road and along to the edge of the forest by a deserted house and transmission tower to meet Mr. & Mrs. Brooks at 10.30 a.m..

On the second week-end in November - November 9th. to 10th. - it is planned to camp at Nowa Nowa camping ground, and from there visit Lake Tyers in the vicinity of Lake Tyers House. This week-end promises to be one of great variety as fossils, shells and wildflowers abound there we are told.

Arrangements for the week-end are not yet complete, but will be finalized at the monthly meeting on Friday October 25th. Those unable to be present at the meeting should contact the Excursion Secretary for details.

----- N.T. Rossiter -----
(Excursion Secretary)

REPORT ON THE EXCURSION TO ROSEDALE RESERVE: On Sunday September 15th. 1968, by Nancy Rossiter.

It was with mixed feelings that a group of field naturalists from the Traralgon and Latrobe Valley Clubs drove along the Limepit Road, Rosedale South, for their mid-month excursion.

Enjoyment of a sunny Spring afternoon, and happy anticipation of the wildflowers to be seen, were marred by the scars of 'progress' on the western side of the road. The limited clearing for the laying of the natural gas pipe-line, and the large areas where the bush had been either completely removed or burnt presumably for further clearing, was a depressing sight for bushlovers. Although this clearing may be necessary for development it is imperative that action should be taken as soon as possible to ensure that a large sample of this outstanding heathland be reserved for posterity.

(Continued over ...)

(The Rosedale Reserve Cont'd.)

The excursion, under the able leadership of Mr. Graham Marshall, made frequent stops along the road to admire the flowering plants and to look for other less conspicuous species.

Of those flowering, the predominating species were the gold and brown pea-flower Showy Bossiaea (B. cinerea), a low shrub with dark green almost triangular leaves; the dainty beard heaths, snowy-white fluffy flowered Common Beard-heath (Leucopogon virgatus) with pink buds and concave, rather sharp-pointed leaves $\frac{1}{4}$ " - $\frac{3}{8}$ " ; rosy-pink Beard-heath (L. ericoides), with very much smaller linear leaves; Tooth Boronia (B. anemonifolia), pink-flowered and with small distinctive three-lobed toothed leaves, and several wattles.

The Spreading Wattle (Acacia diffusa) was at the peak of its flowering with lovely bright yellow heads among stiff narrow sharp-pointed leaves. It is of interest to note the difference between this Gippsland form and that in the Whroo Forest in northern Victoria, where the blossoms are cream-coloured and both the leaves and the flowers much sparser. This latter variety flowers from May to September and is over by the time the southern form starts blooming; Spike Wattle (A. oxycedrus), with catkin-like spikes and broader sharp-pointed leaves; one patch of Sweet Wattle (A. suaveolens), the pale loose flower heads of which were beginning to fade and the scales which surround the unopened buds had all been shed so that this unusual feature which is characteristic of Sweet Wattle could not be observed.

In contrast to the Wattles' gold were several vivid patches of Purple Coral-pea (Hardenbergia violacea). Other flowering plants were Twiggy Guinea-flower (Hibbertia virgata), with large bright yellow flowers; Correa reflexa, the variety with vivid red bells and each petal of which is green-tipped; Golden Grevillea (G. chrysophoea), a shrub with soft light green leaves and golden flowers; several patches of Mosquito Orchid (Acianthus reniformis), tiny hooded flowers of the Helmet Orchid (Corybas diemenicus); and a few Dwarf Greenhoods (Pterostylis nana). Some bushes of Common Heath (Epicras impressa) were still flowering, and a lovely patch of the Blue Love Creeper (Conesperma volubile), and the dainty pink bells of Tetratheca pilosa were seen.

Among the species not yet in flower were Prickly Broom-heath (Monotoca scoparia); Daphne Heath (Brachyloma daphnoides); Cranberry Heath (Astroloma humifusum); Running Postman (Kennedya prostrata); Common Flat-pea (Platylobium obtusangulum); Erect Guinea-flower (Hibbertia stricta); Prickly Guinea-flower (H. acicularis); Dwarf Rice-flower (Pinelea humilis); Snow Daisy-bush (Olearia lirata); Banksia marginata and Banksia serrata; Prostanthera denticulata; two species of Sundews, one with a basal rosette and the Climbing Sundew (Drosera planchonii).

(Continued over ...)

(The Rosedale Reserve Cont'd)

The species on this list are only a fraction of the total number in the area, but it is hoped that future excursions along Linepit Road will provide many additions of plants if the march of progress leaves some of these heathlands for field naturalists to visit.

--- N.T. Rossiter ---

THOSE CITY STARLINGS: by Mrs. Ellen Lybdon.

On the last Sunday in August we delivered our local quota of garden grown native flowers to the Melbourne Town Hall in preparation for the Nature Show that commenced on Monday morning. It was, as usual, a beautiful show, filled with bright gems of the bush from all States that have adjusted to living conditions in the gardens of members of the Society for Growing Australian Plants.

The Victorian Field Naturalists were busy setting up a true to life fern gully, rich with the scent of wattle blossom and deep leaf mould. Taped Lyrebird music heightened the illusion of the male bird dancing on his mound, in the midst of various other birds and small animals of the bush.

That evening after tea we strolled round the quiet city looking at the shops, and as I walked I was haunted by the faint sounds of birds twittering - of starlings softly and contentedly wheezing away their funny little songs. The sounds came in snatches on the strong cold wind, between the rattle of trams and an occasional noisy motor. We were passing one of those Victorian sandstone buildings in Collins Street that are so richly ornamented with leafy pillars and ledges, and looking up we saw that every vantage point supported long black lines of birds packed side by side, and every floral decoration bore its quota, some flying in and out as seagulls do on cliffs. Roosting birds sat with heads to the wall and tails projecting into space, with rather disastrous results, judging by the lower parts of the buildings. On the opposite side of the street we could trace the long black lines of starlings like strings of jet beads. The south facade of the Town Hall was richly festooned but for some reason they had avoided the Swanston Street face that night, although there were certain signs of previous occupation. Perhaps they sensed that that the hall was devoted for a short time to our native-born Australians? Few pigeons were to be seen. So what had been for us a window-shopping walk turned into quite an interesting bird-watching excursion. Modern steel and concrete buildings are apparently unattractive to starlings in search of a roosting place. Can it be that the sandstone retains a little of the days winter sunshine, or does it just give a better grip to a bird's foot?

--- Ellen Lybdon ---

UP MOUNT USEFUL WAY: by Mrs. M. Hague.

Mrs. Hague, our member from Cowarr, has been in poor health this winter and spent a few weeks in hospital. She has not been able to join in Club activities since the Wulgulmerang weekend. In a letter to Mrs. Ellen Lyndon she described several visits to the bush in her district. There is a pleasant picnic spot and a gorge on Stoney Creek, an excellent place for bird observing. Mrs. Hague writes ... " I was delighted to find the Lyrebirds so numerous, even when the creek had dried back to seepage pools. While we were there we heard the most glorious songs - they went through the repertoire of every songbird in the bush. I saw two male birds making their way down for a drink.

Next time I went there were two hen birds on the rocky opposite bank, and I had a good view through the binoculars. When the male began his love calls one trotted across the dry creekbed to his side and the other flew across. Many times since I have heard them. They always put on a concert for our benefit, and we can sit in the car and listen. Coming home along the Thomson River we saw the Azure Kingfisher.

My daughter has heard and seen Lyrebirds higher up the forest road and I found quite a colony two miles away on the Toongabbie side. They are very active, scratching away at the undergrowth. Before I was sick our family party drove up to Mt. Useful and had a lovely day. We followed the old track, the first part of the old gold-mining trail from Seaton. (It used to be known as the Bald Hills). It led to Walhalla, along a forest road to the 'Springs' where we travelled to just under the snow line.

The road was snowy and slippery, reminding me of English winters. We had a barbacue right in the snow, complete with snow fights and snow men.

The valley over Donnelly's Creek was beautiful but the cloud mist spoiled the view of the wonderful panorama of mountains and valleys. As we drove homeward the sunset turned on glorious colors over the wild unspoilt bush, and the Lyrebirds called as if to say goodnight."

--- M. Hague ---

(Mrs. Hague has been missed on Club excursions, and we have also been deprived of her delightful articles which reveal her great love of the Australian bush. We do wish her well.

Ed).

REPORT OF EXCURSION TO THE DUTSON AREA: by Mrs. Lorna
Padfield.

The leader of the excursion was Mrs. E. Lyndon, ably assisted by her husband, and members were grateful to them for the manner in which the day was organised and conducted.

The weather was typically L.V.F. Nat's weather or so we are prone to boast - and is that which we have come to expect on our excursions. The first stop was along the Dutson Road near Carr's Lane, and here we saw many flowers. The most colourful seemed to be Boronia anemonifolia with its pinky-red flowers. There were many plants of the Wedding Bush (Ricinocarpos pinifolius), and one bush had a few flowers open. In flower was the Slender Rice-flower (Pimelea linifolia) and among other species seen were Correa reflexa, Pink Beard-heath (Leucopogon ericoides) and the White Beard-heath (L. virgata). A Star Hair caused some discussion on identification, and we have learned since that it was Astrotricha parvifolia, and can be distinguished by the leaves which are all turned back.

The flowers were most prolific along the roadside where the bulldozer had recently cleared, and a triangular piece of ground along Carr's Lane was thought to be a good area for the creation of a Reserve.

Travelling further along we stopped near a Casuarina which for a time appeared to be nameless, but eventually some members keyed it out to be the Black Sheoak (C. littoralis) and they were shown to be correct. Miss Jean Galbraith so identified it and said that it could be recognised by the very fine branchlets, and the fairly close teeth rings.

We stopped alongside a specimen of Bursaria spinosa and this also was the cause of some spirited discussion on the matter of identification.

We very soon entered the Latrobe Valley and Sewerage Disposal Farm at Dutson Downs, and were met by a guide who led the way along a variety of tracks to our lunching place. Here we were beside large areas of Thryptomene micrantha, the Dotted Heath-myrtle. This has been described previously as T. miqueliana, and in a report of a Club excursion on September 26th. 1964, it was so described. Wandering in the bush here we found Pine Heath (Astroloma pinifolium), a rather small bush with slender yellow flowers tipped with green. The larger trees included the Saw Banksia (Banksia serrata); the Spike Wattle (A. oxycedrus) and the Sweet Wattle (A. suaveolens) AND WERE seen along the Merrimans Creek Road, Rosedale on an earlier excursion.

A few Grass Trees (Xanthorrhoea australia) were noticed and near a windmill we found Prostanthera rotundifolia and Acacia floribunda. These were thought to have been planted here as they do not occur naturally in this area.

(Dutson Excursion Cont'd).

The Blue Dampiera (Dampiera stricta) with its numerous blue flowers, and an Everlasting, the Blunt Everlasting (Helichrysum obtusifolium) were in bloom, and a most outstanding display came from the Silky Tea-tree (Leptospermum myrsinoides) with its white flowers and pinky-white buds.

We left this area to explore the Loch Sport turn-off, and there were many species already described, but perhaps the more prolific of them were the Common Fringe-myrtle (Calytrix tetragona), and Daphne Heath (Brachyloma daphnoides).

There is little chance of forgetting the mosquitoes that were with us most of the day, but we were able to arm ourselves against their onslaughts when they descended upon us.

Also seen during the day were the Common Lotus (Lotus villosa), Twiggy Guinea-flower (Hibbertia virgata); the Erect Guinea-flower (H. stricta); Hardenbergia violacea; Silver Banksia (B. marginata); the Spiny Bossiaca (B. microphylla).

A few orchids were seen, including Pink Fingers (Caladenia carnea), Wax Lip (Glossodia major) and a Greenhood sp. Along the road too we observed the Love Creeper (Comesperma volubile).

This then was the end of another day in the ever interesting heathlands and, after the usual well merited thanks to Mr. and Mrs. Lyndon, members of the party went their separate ways home.

--- L. Padfield ---

A CORRECTION: by Mrs. Bon Thompson.

On the Club excursion of Saturday 24th. August I identified a Guinea Flower plant near the Gormandale Reserve as Hibbertia linearis. However, on further investigation I have found that it was Hibbertia virgata. There were many plants of this latter species, but this particular one was much more twiggy and stiff, but I presume this was so because it was a much more mature plant.

I apologise to those present for the mistake.

--- Bon Thompson ---

MORE NOTES ON THE ACACIA obliquinervia: by Miss N.T.Rossiter.

As a frequent traveller between southern and northern Victoria via Healesville, Toolangi and Yea, it was an exciting discovery when making the journey in mid-September to find a magnificent stand of the newly described wattle Acacia obliquinervia in full bloom for several miles along the road in the vicinity of the little township of Toolangi. When not in bloom this wattle had been passed unnoticed, but on September 20th. it was a lovely sight indeed.

It was of interest to read in Mr. Keith Roger's article (L.V. 'Naturalist' August 1968) of the variation in the phyllodes of this wattle related to the locality in which it was growing. At Toolangi the phyllodes seemed to vary rather with the age of the trees. The seedlings up to three or four feet had the broad, bluish, markedly lop-sided phyllodes which make identification easy, but with increasing age and height they appeared to be narrower, greener, and the main nerve more centrally placed.

In the light of the variability of the lop-sided phyllode it is comforting for the novice to have the distinctive characteristics enumerated by Miss Jean Galbraith in the July L.V. 'Naturalist' to separate obliquinervia from the other two wattles in the group.

--- N.T.R. ---

NATURE NOTES: by Mrs. Bon Thompson.

IMPROVING ON NATURE: Recently in the Blackwarry area we heard an Eastern Whipbird. At first we thought we could hear two Whipbirds and a Lyrebird singing in the area. But, after listening for a while the Whipbird gave its usual sound of the crack of the whip followed by two short notes and the reply came with the crack of the whip and then about six to eight short notes. We thought then that the second song was probably the Lyrebird.

The same day we heard a Lyrebird in Bulga Park. We could recognize most of his songs, but one sound had us puzzled. It was not like any sound in nature, just a conglomeration of notes. One of the party suggested perhaps it was like a sound from a transistor radio. Have any other members heard this bird and if so what is their interpretation of the sound?

PTEROSTYLIS grandiflora: Thanks to Mr. Graham Marshall we had a very enjoyable afternoon recently. Mr. Marshall had found the Cobra Greenhood (Pterostylis grandiflora) at Glengarry North, and kindly passed the information on to us. This is a beautiful orchid that gets its name from the brown flanged effect of the hood and the

(Continued over ...)

(Nature Notes Cont'd)

erect position of the flower.

These specimens at Glengarry North were large flowers on tall stems. It is another of the Greenhoods that have the radical leaves away from the flower stalk, although there are also leaves or leaf-like bracts on the flower stalk. This orchid has been found around Moe, but it is not common anywhere. We have seen it in East Gippsland between Bairnsdale and Orbost, flowering in June. In Mr. Willis's book it is recorded from much of Southern Victoria east of Port Phillip Bay.

WILDFLOWER SHOW: Max and I were fortunate to be able to visit the Wildflower Show in Melbourne this year. I do not think we have spent a more pleasant few hours anywhere. The display of colour was breathtaking!

As each flower was named and marked as to its suitability for growing in the Melbourne area, there was plenty of information to be gained as well as pleasure from the beautiful blooms. There was one table of Wattles, including the newly named *A. obliquinervia*; another table of many different Grevilleas, and still another of many heath-like plants. Among the specimens around the walls were flowers which, while grown in gardens, were native to other States.

The Hawthorn Junior Club had a wonderful display showing microscopes and slides, insects preserved in clear resin, an aquarium display and one of rocks.

Films on nature were also shown at regular intervals. Apart from all the knowledge that was available to us we met friends and made new ones. The time went so quickly that we had a very rushed tea before catching the train home.

I can sincerely recommend a visit to the next Wildflower Show to any members who are able to go along.

--- Bon Thompson ---

CURRENT PERIODICALS RECEIVED: by the Editor.

'Australian Plants', Vol. 4. No. 36. September 1968. Published by the Society for Growing Australian Plants, with a circulation of 10,000 copies.

The cover is a photograph of Grevillea hookeriana, and the contents of this issue is of the usual high standard of articles and beautiful illustrations of Australian native plants which include the Toothbrish Grevilleas, Heaths, Waxflowers, some of the Orchids,

(Continued over ...)

(Periodicals Cont'd)

Flax Lilies, the Firewheel Tree (one of the Proteaceae), Tasmanian climbers, and an article entitled 'A Natural Pond for your Garden', among others.

There is a supplement referring to the publication for which all interested in native flora are awaiting with interest, entitled 'Australian Flora in Colour: Flowers and Plants of Victoria', by G. Ross Cochrane, Bruce A. Fuhrer, Edward R. Rotherham, and James H. Willis. Mr. Willis is stated to have been ... "substantially responsible for the identification of difficult subjects, and described all the flowers and plants illustrated." Mr. Cochrane is a New Zealand biogeographer who 'has done extensive Australian botanical research over a nine-year period, and who contributed the chapters that supplement the colour plates'. Mr. Fuhrer is a well-known naturalist photographer, while Mr. Rotherham is a senior lecturer in photography at the R.M.I.T., and an experienced naturalist.

The Field Naturalists' Club of Victoria collaborated in the publication, and copies of the book will be available through this Club.

'Australian Plants' is priced at 30c. per copy.

'Victoria's Resources. Vo. 10. No. 3. Sept. - Nov. 1968. Published by the Natural Resources Conservation League of Victoria, it is a quarterly and is priced to members and associates of the League at 30c. per copy.

The theme of this issue is 'National Parks', and there is an article by Dr. L.H. Smith on 'National Parks in Gippsland'. Dr. Smith is, as most readers will know, the Director National Parks for Victoria. Referring to the Glenaladale National Park, which many of us know better as including Deadcock Creek and the Den of Nargun, Dr. Smith writes ... "The Park was very severely burnt in the bushfires which ravaged Gippsland in March 1965, but is now recovering very well. Many species of birds are to be found there, including the Lyrebird ... "

And of the Horwell National Park ... "This park, of 342 acres, declared in 1967, is located approximately 10 miles south of Horwell, on the Yinnar - Jumbuk Road ... It contains a tall forest of blue gum and grey gum, and attendant understorey, together with a fine fern gully and good bird habitat. The Butterfly Orchid, a comparatively rare epiphytic orchid is found here. "

'Victoria's Resources' is a fine publication, of inestimable value to naturalists, and all of us who are concerned with conservation. The League encourages, among other things, the growing of Australian plants, and a visit to the nursery at Springvale South will make the visitor wish for many spare acres to plant and watch grow the innumerable species available there.

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(Periodicals Cont'd).

'Australian Natural History Magazine'. Vol. 16. No. 3. Sept. 1968. Published by the Government Printer, Sydney, for the Australian Museum, Sydney. Quarterly at a subscription rate of \$1.40 per year.

This issue contains articles by members of the Museum staff, including Mr. R.O. Chalmers, Curator of Minerals and Rocks; Mr. J.R. Paxton, Curator of Fishes; Mr. J.P. White, Ass't Curator of Anthropology; Mr. H.J. de S. Disney, Curator of Birds; Messrs. W.T. Williams and L.J. Webb, officers of the C.S.I.R.O., and Mr. I. C. Glover, Research Scholar in Archaeology at the A.N.U., Canberra.

As always the contents are author's of very great interest and range of subjects and locality, and written in a language understandable by the intelligent layman. It is well illustrated.

'Wildlife in Australia' Vol. 5. No. 3. September 1968. This is published by the Wildlife Preservation Society of Queensland, the President of which is Judith Wright, Poet, writer, conservationist etc.. The editor of 'Wildlife in Australia' is Vincent Serventy, a well known naturalist and writer of many books and articles on a wide range of natural history subjects. His 'Nature Walkabout', the story of his and his family's journey on a transfer from Perth to the eastern States, which took them six months to do the 15,000 miles involved.

The articles in 'Wildlife in Australia' are always of great interest and variety, they too range all over the continent of Australia, and cater for the young as well as the older naturalist. There is a 'Teachers Page' which is primarily intended for the youngsters, but is just as fascinating for the 'oldies' among us.

With many thanks to the contributors to this issue of the 'Naturalist' we have achieved the 58th. issue of the Club publication. It is known that some of the regular contributors have a feeling of dominating the magazine - but without their continued support it could not be continued in publication.

Once again the 'barrel' is empty - with no spare copy on hand for future issues - as yet. And so once again there comes an appeal for more contributions from more contributors. More contributors from other Clubs as well as the L.V.F.N.C. - more articles from males, as has been suggested by one of the predominantly female contributors.

Address your efforts to the Hon. Editor, (Mr) G.T. Scanlan, Box 95, P.O., Yallourn, 3838.

Lalrobo Valley Naturalist.

1935

Lalrobo Valley Field Naturalists Club.

- Honorary Secretary: Mr. S. Belgraver, 179 Lloyd Street, Moc.
- Meetings: The general meetings are held on the fourth Friday of each month at the Yallourn Primary School, at 7.30 p.m.
- Excursions: Usually on the Saturday or Sunday after the General meeting, as shown on the programme of events for the year.
-

Warragul Field Naturalist Club.

- Honorary Secretary: Mr. Jack Brooks, Box No. 120, Warragul
- Meetings: Are held on the third Friday of each month at the Albert Street State School, beginning at 8 p.m..
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-

Traralgon Field Naturalist Club.

- Honorary Secretary: Dr. D.W. Collins, 4 Charles Street, Traralgon.
- Meetings: Are held on the second Friday of each month at the Gray Street School, starting at 7.30 p.m..
- Excursions: These are arranged usually for the Sunday following the general meeting.

All of the Clubs welcome visitors to their General Meetings and Excursions.

ISSUE No. 59.

NOVEMBER, 1968



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LATROBE VALLEY NATURALIST

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LATROBE VALLEY FIELD NATURALISTS' CLUB

YALLOURN, VICTORIA

Dear Fellow Field Naturalists,

Notes of the Excursion Secretary

Following Mr. Roy Wheeler's talk on "The birds around us" on Friday, 22nd November, the club will join the Bird Observers Club on Saturday, 23rd November, in an excursion at Tarra Valley Park, lead by Mr. Wheeler. This replaces the excursion planned for Sunday, 24th November, to the Cowarr district.

It is suggested that members arrive at Tarra Valley at 11 a.m., allowing 1 hour to 1½ hours for the journey.

On 8th December, there will be a half day excursion to the Morwell National Park when it is hoped the tree-orchid *Sarcochilis Australis* will be blooming. Members are asked to meet at the Hazelwood arboretum at 1.30 p.m.

Anyone needing transport on excursions should ring Yallourn 52392 at least 2 days beforehand so that a local meeting place and time can be arranged for picking up passengers.

N.T. Rossiter

At the executive meeting of 30th October, possibilities were discussed about the preservation of the Heathlands along the east side of the Lime pit Road near Rosedale. The Lands Department will be approached in this regard.

The programme for 1969, as prepared by the sub-committee, was discussed and accepted. The speakers for our general meeting have been approached to lecture at these meetings and were also invited to lead the excursion on the following day. As soon as their answers are in hand, the programme will be printed.

Some financial matters were finalised, securing our membership of the Advance Latrobe Valley Association and paying the account for the covers of the "Latrobe Valley Naturalist".

The next meeting of the executive will be held on Wednesday, 27th November, at the home of Mr. and Mrs Homann, 84 Hennesey Street, Moe.

S. Belgraver

EARTHWORM EXCURSION: by Ellen Lyndon.

Saturday October 5th. was a perfect day, in fact, the October sun, making one of its rare appearances, was extremely hot. Better still were those enthusiastic members digging furiously in the bottom of a muddy trench in the Bass River Valley. Leongatha members of the Club needed a couple of giant earthworms - for strictly scientific purposes of course.

We chose a spot where a bulldozer had been working until the rain stopped it, the site for a new road bridge. Topsoil to a depth of several feet had been scraped together to form a causeway and the bared soil beneath was full of worm and yabby holes. One large worm was half in and half out of the ground, the outer part quite dehydrated by the sun. Kookaburras sat about in adjacent trees, earnestly scanning the ground. They accepted tidbits thrown to them while we worked. No doubt when the 'dozer is working they fare very well. Even large worms are easily broken in pieces when beaten on the ground, or against a limb.

The diggers found worms in almost the first shovelful, but they move very fast and are difficult to extract in one whole length. The required specimens were eventually disinterred in good shape, not particularly large ones, about two feet long, and thick in proportion. Early writers speak of worms to nine feet in length, but either they grew bigger when the habitat was natural or the length has grown with the years. It is very likely that they would have been a giant race when the earth was covered with a damp rich leaf mould beneath the forest. No eggs were to be found although there were plenty of smaller worms. It was in the autumn that the long egg capsules were found, on an earlier Club trip.

Dr. Leach in his "Australian Nature Studies" (and what would we do without him?) explains how the ordinary earthworm softens the soil and swallows it as it progresses. Though it has no definite sense organs it can smell and taste and is sensitive to touch, and to vibrations. Its skin is its breathing organ, oxygen passing into the blood and carbon dioxide passing out. Each of its rings is provided with four pairs of bristles, which can come into operation as required. It protrudes those at the hinder end, fixing that part of the body. The front part is then thrust forward, the bristles grip the burrow and the hinder end is drawn up. The common earthworm may have 150 rings along its length. The giant variety would have several hundreds. It is no wonder that it is so very difficult to dislodge a determined worm when it throws out all the anchors! If a worm should be cut in half, each part is able to grow the missing portion so that it may become whole again. A very happy arrangement.

The worms do not occur in the soft silt banks brought down by the river, but live in a band of wet whitish clay well below the topsoil. The numerous tunnels hold their shape in this and ooze small streams of water to lubricate the passage of the occupants. Some tun-

(Continued over ...)

(Earthworm Excursion Cont'd).

nel sections are filled with worm casts, like deposits of sawdust. Megascolides is still plentiful in the wet valleys and hillsides of the Strzeleckie Ranges, for reports of its presence come to us from widely separated localities.

On June 17th. 1946, the King's Birthday holiday, the Field Naturalists Club of Victoria organised a mystery excursion by rail and foot, alighting at Loch in the Bass Valley and walking across to Nyora to catch the train for the return journey. Mr. H. C.E. Stewart recorded this adventure in the July Naturalist of that year. Not even the leader of the party had ever visited the area before. They were hardy folk in those days to tackle an unknown walk of twelve miles in June in the Gippsland hills. By good fortune they met a local farmer, Mr. Davenport, who lives on the river, and they enquired where they might find the earthworms. He soon armed them with shovels, and the party reported a most interesting day. They arrived at Nyora in darkness and cooked the evening meal on the fire in the station waiting-room while waiting for the train to take them home. Mr. Davenport told them that the average Giant Earthworm would measure four feet. In September of the same year Mr. Stewart added some further notes about the worms and remarked that, although the anatomy and general structure of the worm had been described and figured by Baldwin Spencer and McCoy, little seemed to be known about the creature's habits and life economy. Also, knowledge of the eggs was very incomplete. Naturalists, said Mr. Stewart, might well undertake some field research in this direction and record their findings. Surely here is a project that some of our Gippsland Clubs might well take up. Even a survey of their range through the hill country would be worth while.

--- Ellen Lyndon ---

THE VICTORIAN NATIONAL HERBARIUM: by Bon Thompson.

The Victorian Herbarium is attractively situated in the Royal Botanical Gardens next to the border of Australian plants. Mr. Pescott is the Director of the Royal Botanical Gardens and is therefore in charge of the National Herbarium. Mr. Willis, whom some members know personally, and all good botanists know all from his authoritative writings, is the Assistant Government Botanist and is next in charge at the Herbarium. There is a staff of thirteen, specialising in many different branches of botany.

At the moment the pressed specimens at the Herbarium are being rearranged into a new system that will allow for quicker reference. There is a very comprehensive collection of pressed specimens of Victorian native plants in one section. Besides these there are plants from

(Continued over ...)

(National Herbarium Cont'd).

all States of Australia and from all over the world. Many of the specimens are very old, for example specimens collected by Joseph Banks, and others collected by Baron von Mueller. Some of the plants, of which the Herbarium has pressed specimens, are now extinct in the world. There are some fascinating and unusual specimens, like the Conifer that grows in the Antarctic - it has only two long leaves, but lives for something like 100 years.

This year there has been much identification work to be done for the Department of Agriculture, and others about plants that have appeared in pastures after farmers have used hay bought from other States. These plants have to be identified and information supplied as to whether or not they are likely to become a nuisance and if they are toxic to stock. Many enquiries are also received about flowers for cultivation in gardens, and many of course about native plants. The Botanical Gardens staff grow plants for the Herbarium so that they and their flowers can be studied in relation to growth, pollination and in other aspects.

The library of the Herbarium is the best botanical library in the Southern Hemisphere. Apart from keeping copies of many publications on plants, there are also kept many valuable old books referring to botany. Among these is a book, printed in 1673, written by William Dampier on his discovery of Australia. Also in the library are kept some personal effects of Baron von Mueller, so that he becomes more than just a name of a great botanist.

Interesting too is a card index system of all Victorian native plants with reference to all locations of habitat - this is kept up to date as new locations are reported. I believe it to be a remarkable feat for a staff of thirteen to do all the work that it does at this 'cur' National Herbarium.

--- Bon Thompson ---

EXCURSION TO LABERTOUCHE, SUNDAY OCTOBER 27TH: By Nancy Rossiter.

Again our thanks are due to Mr. & Mrs. Brooks for leading an interesting and enjoyable excursion through the three Wildflower Reserves in the Labertouche area. We were pleased too to have four members from the Geelong Field Naturalists Club with us, and hope that more members of their Club will visit us.

Boronia muelleri again provided a wonderful display and at the southern edge of the forest the brilliant blue patches of Dampiera stricta were even more plentiful than on previous visits. Bright yellow sprays of the Handsome Flat-pea (Platylobium formosum) were much photographed, and the starry-white flowers of Phacelium bilobum made a fine sight.

(Continued over ...)

(Excursion to Labortouche Cont'd).

The rare Grevillea barklyana was just beginning to bloom. Quite a number of these trees had been uprooted by a severe windstorm, even though well protected by the surrounding forests. However, it was heartening to see the large numbers still thriving.

As a list of the species seen on a previous excursion in this area has been given in Newsletter No. 13 of November 1964, and as Mr. Brooks is preparing a more complete list for future publication, no additional list will be given here.

An unexpected object of interest was a very small marsupial mouse found by Mrs. Brooks at the side of the road near our final stopping place. It was so tolerant of our inspection that we thought it must be ailing, although no signs of injury were apparent. It was about 5½" long from nose to tip of tail, grey fur with brown tipping, and small ears close to the head and not protruding above it were the main characteristics noted. A study of Troughton's "Furred Animals of Australia" suggest the Dusky Marsupial Mouse as the most likely identification, although the size given is definitely larger than that of the specimen seen.

Altogether this was a most satisfactory day, culminating in the drive through many miles of beautiful forest unmarred by the signs of 'progress' before coming out into open country near Neerim, where we said goodbye to our friends and travelled home through the picturesque gently undulating farm lands in the late afternoon sunshine.

----- N.T.R. -----

BIRD VISITORS FROM THE NORTH: by Nancy Rossiter.

A field naturalist in North-eastern Victoria, Miss. D. Nason, has reported seeing very tiny parrots, about the size of a Diamond Firetail-Finch, feeding in the flowering Swamp Gums on her property in the Warby Ranges.

She has described them as being olive-green, lighter underneath, with distinct patches of blue above and below the beak. When first observed they were feeding with a large, noisy group of honey-eaters. On another occasion when they were alone the birds were feeding very quietly, but when flying in a small flock they made a weak twittering noise. From their size and markings these parrots must have been the blue-browed fig Parrot of southern Queensland. It is understood that these parrots have not before been recorded as having been seen in Victoria.

----- Nancy Rossiter -----

HYBRID WARATAHS: by Bob Auchterlonie.

Among the earlier plantings at the Hazelwood Arboretum were two plants of what was assumed to be the Gippsland Waratah, Telopoea oreades. There was good ground for this assumption, for had I not raised the plants myself, from seeds gathered from the Gippsland Waratah tree growing in our own garden at Narracan? However, I had not attached due significance to the fact that also growing in our garden, and flowering at the same time were three bushes of the New South Wales Waratah, T. speciosissima.

One of the Arboretum specimens came to grief when the old pine trees were being removed. The sole survivor flowered for the first time this Spring, producing a single head of bloom which showed unmistakable signs of T. speciosissima parentage. In fact, except for having smaller floral bracts, it was a typical N.S.W. Waratah bloom, with its large, high-crowned dome of florets, regularly arranged, and borne erect on a stiff stem. Gippsland Waratah blooms are smaller, flatter, and tend to face sideways on their thinner, more supple stems. Leaves of T. oreades are entire, dark green, with sometimes a slight glaucous cast, and only the midrib is prominent. In T. speciosissima leaves are toothed or jagged, light to mid-green, never glaucous, and show a prominent network of lateral veins. Although the Arboretum specimen has entire leaves, a number of younger seedlings from the same source show toothed leaves and prominent venation, so it appears that all will prove to be hybrids.

The parent tree of Gippsland Waratah in our garden is a very handsome tree, about 20 feet high, bearing regularly each Spring several hundred heads of bloom, yet it sets very little seed. The structure of the waratah flower is such that it cannot avoid self-pollination. In the bud stage the stigma is lightly pressed against the anthers. When the flower opens, the pollen is ripe, and the stigma draws away from the anthers, carrying a liberal dusting of pollen with it. However, it may not be receptive at this stage, for the flower remains fresh and attractive for many days, and exudes a copious flow of nectar, which is a great attraction to the honeyeaters and bees.

The above evidence seems to indicate that this particular waratah is self-sterile, and requires pollen from another plant for fertilisation. In the absence of another plant of the same species, it appears to be compatible to a limited extent to the pollen from a related species.

Four more seedlings from this tree were among the latest plantings made at the Arboretum this month, so we will await their development with interest.

SOME ASPECTS OF NATIONAL PARKS ECOLOGY: by Professor J.S. Turner, University of Melbourne. (From Victoria's Resources, Vol. 10. No. 3. Sept. - November 1968.)

The concept of national parks was pioneered in America partly by eminent statesmen and others interested in the magnificent scenery of the American wilderness, and partly by naturalists like John Muir, who played a leading part in the establishment of the Yosemite National Park. Muir, and the others of his kind, could be regarded as amateur ecologists.

Early naturalists were content to collect and identify new plant species during their explorations, but from 1900 onwards biologists generally came to study not only the plant species but also the plant community in the field, and endeavoured to understand the way plants and animals lived together in their natural environment. In this way the science of Ecology was born. It is a tremendous pity that the early explorers of Australia had no understanding of, let alone training in, this branch of biology, because they left extremely inadequate accounts of the original plant communities, then untouched by white man. Few of these communities survive undamaged, and few will survive unless further extensive reserves are established within the next few years.

One of the functions of a national park is, of course, to conserve the species of plants and animals still surviving. It might be possible to do this by bringing together all known species in a series of botanical gardens and zoos - living museums. Only forty years ago distinguished botanists, with this in mind, carried seeds of rare native plants to Wilson's Promontory and spread them around in the hope that they might establish themselves there in relative safety. These "experiments" were probably not successful, which is as well, because no present-day ecologist would dream of attempting to interfere in such a way with a natural plant community in a park, except in so far as interference was necessary to preserve the original condition or some special feature of interest. What we hope to do today is to establish enough national parks to preserve all threatened species, while maintaining (if necessary by management) the plant and animal communities in as natural a state as possible. Such parks would then be of interest not only to naturalists and historians, but of immense value to biologists studying the nature of the living world.

In 1961 a study was made of the distribution and conservation of the various species of plants in South Australia. There were some 2,255 plant species there, of which only 42 per cent. were to be found in the national parks of that State. There were 540 introduced plants, mostly weeds, in South Australia, and 43 per cent. of these had already found their way into the national parks. It was also established that many typical and important plant and animal communities of the State were not then represented in any national reserve.

(Continued over ...)

(Some Aspects of Nat. Parks Ecology Cont'd)

We are not yet in a position to give comparable figures for Victoria, but they should be available shortly when Mrs. Frankenberg's report, "Nature Conservation Survey of Victoria", is published.

We know already that a large number of the native plant communities and many of the species are not yet preserved in any national park in Victoria, and that there are 227 species of Victorian native plants in danger of extinction. Many animal species are in similar danger.

The areas set apart for national parks must, therefore, be sufficiently large and diverse to preserve not only species, but whole communities, and what is called the ecosystem, the whole complex of characteristics - environmental and biological - of a given area. Small reserves will rarely survive the pressure of development over the years, especially when they are in the neighbourhood of great cities or main roads. It is most important, however, to preserve as much as possible of the native vegetation and landscape outside national parks, and even small wildflower reserves have immense educational values, even if not all of them have permanence.

Many of the national parks of America (and of Australia) have an appeal due not only to their content of wildlife, but also their scenery. They therefore attract tourists, which today means motorists; unless these people are taught something of the biological functions of national parks they will tend to agitate for more "development" - roads, chalets, footpaths, camping facilities, sports grounds. We must recognize a need for country playgrounds; some parks (but few, if any, in Victoria) are big enough to allow multiple use; others are so small (e.g., Bulga Park) that their protection from the visiting public will become increasingly difficult. Such small reserves, if they are not to be trampled out of existence, require continual vigilance by park rangers; moreover, unless they are protected by a "buffer" area they are only too likely to be ruined by changes brought about by land clearance, drainage or settlement on their borders.

For example, a small fern gully or piece of rain forest surrounded by cleared agricultural land has little chance of survival. Some years ago a sample acre of very tall mountain ash trees was reserved in the Cumberland Valley. When this was first set aside it was surrounded by similar but less valuable forest. Later, timber millers were allowed to remove the trees from the "buffer" area. The effect of this has been to isolate the sample acre and to expose it to wind and storms. It is rapidly degenerating. This is not so at Wallaby Creek, in a reserve maintained by the Metroploitan Board as a water catchment. Here there is a surviving four square miles of almost virgin mountain ash forest, slightly damaged by fire and by early timber splitting. The whole forest community is surrounded by a large buffer area of less valuable forest and represents one of our finest national assets.

(Continued over ...)

(Some Aspects of Nat. Park Ecology (9) Cont'd).

Our national park at Wyperfeld preserves Mallee vegetation and animals; it is a big park, but in 1959 a large part of it was seriously damaged by a man-made fire, neglected in its early stages. It is becoming well known, and last year over 6,000 people visited it. Such a reserve, in arid country, could easily suffer erosion if car access became too easy; it is also likely to be damaged by the invasion of weeds from neighbouring farms - especially if aerial top-dressing is carried on along its boundaries. A thorough study of the ecology is required if we are to manage this difficult area in a way which will ensure its survival.

The need for a more ecological approach to conservation is clearly indicated by statements often made (even by those in charge) about some of our smaller reserves. All too often it is thought that only the dominant species - a tree, a tea-tree or a single animal species - is of importance. Thus one hears talk of burning or bulldozing the "rubbish" that comprises the ground flora of a reserve. It is not realised that it is often this component of the vegetation that provides interest or beauty; that the shrubs and ground flora protect the soil from erosion and support a rich animal life; that their survival may be essential to the survival and regeneration of the larger species.

The management of the vegetation in a national park can mean the maintenance of the plant communities in their native state. Almost as frequently, however, it means the maintenance of the vegetation in a particular condition which it has reached as a result of some interference by man. Some examples of this type of management are as follows:

The famous Wicken Fen near Cambridge is almost the last surviving piece of the ancient fenlands which were drained several centuries ago. Since that time the fen has been utilised by villagers for the production of reeds for thatching, etc., and as a result the modified fenland carried many interesting plants and animals, including some rare butterflies, which are adapted to the man-made conditions. Experiments have shown that if the fen were left entirely to itself it would be quickly covered in the course of a few years by a dense growth of scrub, and much of its interest to naturalists would be lost. The authorities in charge of Wicken Fen therefore manage it in such a way as to prevent the natural succession to woodland, and in this way provide for biologists a much more varied biological reserve.

In a nearby woodland, which is managed by the Nature Conservancy, a detailed plan of management has been drawn up which ensures that a very varied group of plant communities is maintained indefinitely in their present state, and this again gives a much greater variety of habitat and preserves a much larger number of plant and animal species.

A final example from Victoria is that of the heathland of Wilson's Promontory. It has been shown by members of the Botany School

(Continued over ...)

(Some Aspects of Nat. Park Ecology Cont'd).

of the University of Melbourne that the interesting natural heathlands on Wilson's Promontory have been invaded over the past thirty years by a tall coastal tea-tree, which is exterminating the much more interesting plants of the heath. It seems likely that the management of this area (if we are to retain a large area of open heathland) will involve very carefully controlled burning at fairly long intervals, the object of which would be to kill the coastal tea-tree, to prevent it receding and to allow the open heathland (which is more fire-resistant) to survive.

These are only a few examples of the real problems of tackling the conservation of wildlife in a modern world. The solution of these problems requires first of all the education of our young people in field biology - so that more support can be given to those politicians who already realise the value of national parks. The national park system in Victoria is urgently in need of such support and of greater financial provision. Secondly, we urgently need a classification of our parks, so that wildlife and tourist interests can both be handled satisfactorily. More especially on this occasion I want to urge the importance of the Ranger - the trained men living in the park and handling its day-to-day problems.

Overseas experience has for long made it clear that a prime essential in successful park management is an efficient corps of well-trained rangers. The senior rangers at least should be men with training in ecology, capable not only of educating visitors and getting them interested in the biology of the area, but also of preparing and executing plans for the proper management of the natural communities under their care.

Park management today is too much concerned with the provision of roads, camps, car parks, toilet facilities and the like, and far too little with such things as fire protection and the use of fire, the control of aggressive species (plant and animal, both native and introduced) and the education of the rangers and the public in national park values. The whole status of the ranger corps must be raised and salaries offered which will attract and hold good men.

No national park can be properly served unless the caretaking and policing of tourist camps is supplemented by a management system which includes men on the spot with real technical competence in natural history and ecology. Such men need field-laboratory and simple museum facilities, not only for teaching purposes, but because efficient management of national parks requires intensive and continuous research work in ecology.

Victoria now has three universities (largely State supported), whose biological departments are training men as ecologists who would be able and willing to do an excellent job as senior rangers in our major national parks. At the same time the Authority

(Some Aspects of Nat. Park Ecology Cont'd).

finds itself unable to provide funds to employ such men in sufficient numbers for its ranger services. It does not seem sensible to pour money into universities and to train people for the numerous specialist jobs needed in our complex civilisation unless, at the same time, we are prepared to establish posts where trained people can be of real benefit to the State.

Finally, and this is a personal view, I believe that the National Parks Authority must itself, in future, take more direct responsibility for the parks under its control. Committees of management have done an excellent job to date, and they should certainly be retained in an advisory capacity, and for that purpose strengthened with specialists in the field of conservation. But I do not believe that the present divided control provides the correct answer for the full development and proper management of our system of national parks.

THE BLACK SNAKE AT DUTSON: by Ellen Lyndon.

In the Dutson area, on the day before the Club excursion, we were driving along a narrow track with bush to each side of it. Presently we came to a splendid black snake, stretched full length in the hot sun, and effectively blocking the traffic, as we had no wish to damage the car. It must have been all of five feet in length - I regretted not having a tape measure. The black snake, Pseudochis porphyriacus, is a glossy coal black. I can best describe its shape by saying that it has magnificent shoulders but a very small neat head and neck. The body is thick and wide until it tapers off sharply at the tail. This one suffered itself to be examined for the best part of ten minutes, lying perfectly still save for the constant flickering of a jet black forked tongue. When at length it decided to move it did so with surprising speed, weaving in and out of the scrub faster than I could run. Most authorities consider the black snake the least harmful of our local kinds and say that it will bluff rather than bite, and that it is unlikely to deliver a lethal bite, the effects being mainly local. Furthermore, it may be easily tamed!

We saw another large one later in the weekend, it had been despatched by the owner of a hayshed because he thought it was about to take up residence in the hay. Its underparts were a beautiful salmon pink. The black snake produces up to 40 live young, about 8 inches at birth. This is a handsome and fairly harmless reptile, and I would like to see enlightened naturalists spare its life when it is encountered in the wilderness.

Refs: Eric Worrell "Dangerous Snakes of Aust. & New Guinea".
D.R. McPhee "Snakes & Lizards of Australia".

Latrobe Valley Field Naturalists Club.

- Honorary Secretary: Mr. S. Belgraver, 179 Lloyd Street, Moc.
- Meetings: General meetings are held on the fourth Friday of each month at the Yallourn State School, commencing at 7.30 p.m.
- Excursions: Usually on the Saturday or Sunday after the general meeting, as shown on the programme for the year.
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Warragul Field Naturalists Club.

- Honorary Secretary: Mr. Jack Brooks, Box No. 120, Warragul.
- Meetings: Are held on the third Friday of each month at the Albert Street, Warragul, State School, beginning at 8 p.m.
- Excursions: Are held as arranged, usually two weeks after the monthly general meeting.
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Traralgon Field Naturalists Club.

- Honorary Secretary: Dr. D.W. Collins, 4 Charles Street, Traralgon.
- Meetings: Are held on the second Friday of each month at the Grey Street, Traralgon State School, starting at 7.30 p.m.
- Excursions: These are arranged usually for the Sunday following the general meeting.
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Each Club welcomes visitors to their meetings and excursions.

The Latrobe Valley Naturalist: Is the official publication of the Latrobe Valley Field Naturalists Club. Contributions on any aspect or branch of natural history are invited from any persons interested and should be addressed to the Honorary Editor, (Mr) G.T. Scanlan, P.O. Box 95, Yallourn, 3838.

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DECEMBER, 1968



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LATROBE VALLEY FIELD NATURALISTS' CLUB.

YALLOURN. VICTORIA.

Dear Fellow Field Naturalists,

Forthcoming events: The next meeting of the Club has been arranged for Friday 17th. January 1969, and will take the form of a film night - the films being of natural history subjects - and members can be assured that the films will be of the usual high standard and interest.

Camp-out on the Dargo High Plains: Excursion Secretary Miss Rossiter has supplied the following information for the usual January camp-out.

On January 25th. - 27th. the Club is proposing to camp at Lankeys Plain on the Dargo High Plains, and it is hoped that members of the Sale, Bairnsdale and North-eastren F.N Clubs and also some Melbourne field naturalists will be able to join us there.

Some members of the L.V.F.N.C. will be travelling up on Friday 24th. and will put up notices at the north and south sides of Lankeys Plain for the guidance of later-comers. The route to follow is along the Princes Highway through Stratford and at about 14 miles beyond turn left at the Fernbank Road and proceed northward following the signposts to Dargo. Caravaners will have to make Dargo their headquarters and travel to the Dargo High Plains each day.

Campers must take all equipment with them, including food and drinking water - the last petrol station is at Dargo.

If the weather is up to the expected standard for excursions this should be a wonderful weekend.

Some Notes from the Executive Meeting held on the 27th. November., supplied by Mrs. Lorna Padfield.

Roadside Clearing: A letter has been drafted and will be sent to all local shires and other bodies expressing concern at the apparent indiscriminate clearing of the roadsides. The letter emphasises the fact that some vegetation alongside the roads is most desirable from the point of view of retaining aspects of natural beauty as well as some protection for birds and other native fauna.

Name Badges for Members: It has been decided to obtain name badges for members in order to help with identification of fellow field naturalists at meetings and excursions.

January Film Night: As referred to above, this is to take the place of the general monthly meeting for January.

Visit of Members of the Field Naturalists Club of Victoria: From the 26th. December to the 1st. of January members of

(Executive Meeting Notes Cont'd)

the Victorian Field Naturalists Club will be on tour in the locality of the Latrobe Valley. Tours have been arranged for each day, and members of this Club will be welcome to join in. Any interested members in joining the tours over this period should contact Miss. M. Allender at the Trans-Eastern Motel at Traralgon between the two dates referred to.

Next Meeting of the Executive: The next meeting of the Club Executive Committee will be on Wednesday 5th. February, at the home of Miss Jean Galbraith, Tyers.

REPORT OF EXCURSION TO TARRA VALLEY & BULGA PARK: by
Tom Moretti.

The weather on the 23rd. of November was not that usually arranged for F.N.Club excursions, but some stalwarts braved the elements, and met at the Tarra Valley National Park, with members of the Bird Observers' Club of Victoria, for a combined outing.

When we arrived at the Prk we saw an empty 36 passenger bus and a car in the parking area, but no people - they were all in the damp depths of Tarra Valley seeking and listening for those elusive feathered creatures which one tends to see when alone but are not to be seen or heard when 'two are company but three make a crowd'. However, after setting out in serious search at about 11 a.m. we had some very good sightings of birds which included the Rose Robin nesting about 30 feet up in a beech tree; Pink Robin feeding its young at a nest some 8 feet above a little creek; a Yellow Robin; Rufous Fantail with a beautiful coppery tinted tail and the Golden Whistler. In the open were the friendly little Flame Robins; the White-browed Scrub-Wrens were more elusive and always on the move; the Brown Thornbill; Tree-Creepers and the Pilot Bird that follows the Lyre-bird calling "I'll give you a guniea a week"; the Ground Thrush and its cousin, the Grey Thrush.

In a fine Mountain Ash which we were admiring was to be seen an Eastern Rosella (or 'tomato Sauce Bird' as the youngsters say) and it was probable that there was a pair of them nesting in the tree.

The Park also had an abundance of flora typical of rain-forest and a fungus that looked like a small domed piece of honeycomb was picked up and brought back for identification and photographing. It was the fungus that grows on the Myrtle Beech, it is thought, exclusively.

(Continued over ...)

(Tarra Valley Excursion Cont'd)

As the afternoon passed the weather deteriorated and became wet - the party gradually broke up, we to make our way homewards and the bird observers to their arranged accommodation at Yarram. On the day following they were to observe the birds of the sea and seashore in the vicinity of Seaspray, including the long legged water birds and ducks to be seen on Jack Smith's Lake.

--- Tom Moretti ---

BAIRNSDALE MEETING AND EXCURSION - November 15th and 16th.: by Miss Jean Galbraith.

Five members of the Latrobe Valley Field Naturalists Club, as well as members of the Sale F.N.Club, and other visitors, greatly enjoyed the November meeting of Bairnsdale Field Naturalist Club when the guest speaker was our Assistant Government Botanist, Mr. J.H. Willis. He outlined for us Baron von Mueller's great journey, with no companion but his old white horse and a packhorse, westward over the Keilor Plains, through the Grampians, down the Murray, southward to the coast near the Gippsland Lakes, and back to Melbourne from the east. The Baron made many journeys, but this was his greatest in Victoria. He was away for six months, and in that time he explored and collected (climbing every mountain on his route) over the Keilor Plains, through the Grampians, northward to Swan Hill and down the Murray past Mildura, then back upstream over all the long miles to Albury, down the Mitta Mitta Valley and across to the Gibbo Range, up the Snowy to the border, south-east to the Tambo, east to Cabbage Tree - round and about the Lakes, and so, with intermittent excursions to the coast, westward, through the Latrobe Valley to Melbourne. And remember this was through wild country, all but the still unsettled country very different from the same places now. What a journey !

Mr. Willis briefly outlined the route for us. then following it in more detail, and in his usual pleasantly informal style, spoke of the plants the Baron would have seen on the way, showing us beautiful slides of many of them.

Next day, Mr. & Mrs. Willis and friends, and the five members of our Club joined our neighbour Club again on an excursion to Mt. Elizabeth, east of the Tambo, approximately 30 miles north of Bairnsdale. The mountain was very dry except in the gullies, but with flowers in abundance amongst the loose stones. We stopped several times on the winding road, to botanise, finding amongst other flowers Hibbertia astrotricha with its shining little leaves, Blue Dampiers (D. stricta), and Prickly Bush-pea (Pultenea juniperina), and, in a damp gully

(Bairnsdale Excursion & Meeting Cont'd)

an unusual downy form of Clematis with velvety buds and young leaves. This we saw many times afterward until attention was claimed by a white-flowered Phacelia with shining little leaves (oval) - a species to be described by Mr. Paul Wilson of Perth Herbarium, whose paper on Eriostemon and Phacelia is now with the printer.

After a lunch stop in a ferny glade, cars were left while we climbed the last rather steep half mile to the granite boulders of the summit, where the Monkey Mint-bush (Prostanthera walteri) used to grow (we did not see any) and where the white Phacelia was abundant and beautiful. Amongst other plants on or near the summit were Acrotriche divaricata, Lemon Bottle-brush (Callistemon pallidus), and an unusual Guinea-flower which appears to be a form of the rare Hibbertia spathulata with long-stalked flowers and other minor variations.

Mr. & Mrs. Peterson were able to remain with the party for the second excursion on Sunday. The rest of us from the Latrobe Valley had to leave before the end of Saturday's excursion, of which Mr. Willis wrote, a few days later - "After coming down the Mount we took a more easterly track back to the junction of the Timbarra and Tambo Rivers and, not far before the junction, came upon a wonderful wildflower garden: Westringia glabra, Holichrysum baxteri, Caladenia conopsea, and lovely Boronia ledifolia - the pride of the afternoon."

We should have enjoyed the longer excursion had we been there, but even without it, brought home a rich harvest of memories of mountains, flowers, and good friends, as well as the increased knowledge of plants that results from any excursion shared with Mr. Willis.

--- Jean Galbraith ---

"THE TIME HAS COME ..." by Mrs. Doroon Nason. (With
apologies to Lewis Carroll).

The Councils and the C.R.B.
Were walking through the land,
They went to see each waving tree
Making its gallant stand.
"If these were only cleared away",
Said they "it would be grand."
"If forty men with axe in hand
Attacked them for a year,
Do you think then" the Councils said
"That we could get them clear?"
"I doubt it" said the C.R.B.,
And shed a bitter tear.

(Continued over ...)

("The Time Has Come ..." Cont'd)

But forty workmen hurried up
All eager for the fray,
With 'dozers, tractors, saws and cranes,
They made a brave array.
And blasting powder thrown in too
To help to clear the way.

"Oh, tourists come and talk with us",
The Councils did invite.
"We only have your good at heart,
In doing what is right -
To take these silly trees away
That so obscure the light."

The tourists didn't play the game,
They didn't quite concur
With what was being said to them,
And even made a stir
When one of them was heard to say
They liked things as they were!

The Councils and the C.R.B.
Went out to view the kill -
They thought to find the trees all gone,
But found them standing still.
A truly lovely sight they were -
It made them feel quite ill.

The Councils and the C.R.B.
Searched 'til day was done.
They tried to call their workmen up
But answer they got none.
Because field 'nats and such as they
Had slaughtered every one !

--- C.D.N. ---

THE BIRDS AROUND US: Report of a talk by Mr. W.R.
Wheeler. Reported by Frank Jones.

At the General Meeting on Friday the 22nd. November,
the well known ornithologist, Mr. Roy Wheeler treated the audience
to a most instructive and entertaining talk on birds. Illustrated
by about 150 slides and interspersed with snippets of the curious

(Continued over ...)

(The Birds Around Us Cont'd)

and little known facts that make our bird life so interesting, Mr. Wheeler's talk was thoroughly enjoyed by all. Apart from depicting the beauty and describing the habits of our birds this lecture also served the purpose of reminding us once again of the wealth of wonderful bird life around us. In most areas some of the birds are not easily seen, but Mr. Wheeler's slides show the rewards that can be expected if we go to the right places and watch patiently.

Among the slides shown was the Pitta of northern areas and we were also shown that Gippsland too, has its rare and beautiful birds. Emu Wrens, Nightjars, Quail-thrushes, Ground Parrots, we share these with other areas of course, and in certain places they may be comparatively common, but it is always exciting to find them in places where they are apparently seldom seen, and to ponder on whether they are to be found in places we know, close to home. Mr. Wheeler's talk covered a wide field from the peculiar nesting habits of the Emu, Mallee Fowl and Yellow-tailed Thornbill, to the marvelous migratory flights of some of the waders, and the annual trans-oceanic travels of the Short-tailed Shearwater (Mutton Bird). The more common, but not less beautiful birds, such as the Golden Whistler, Welcome Swallow, White-eared and Crescent Honey-eaters, and Red-browed Finches were also shown. These are birds that can be seen by any bird-watcher, but about which much has still to be learned. The birds of prey were represented by the Black-shouldered Kite, Brown Goshawk, Peregrine Falcon, Powerful Owl and Tawny Frogmouth. Of the water birds there were, among others, the Albatross, Penguin, Grebe and Gannet. Other birds mainly notable for the sheer beauty of their plumage were the Rainbow Bird, Azure Kingfisher, Rufous Fantail, Satin Flycatcher and Beautiful Firetail. We were also shown a very good slide of the newly described Grey Grass Wren of the inland.

A series of slides showed the nests of birds, a few on the food of birds, and for good measure our speaker made reference to the need for conservation measures, the interest being taken in our birds by people from overseas, the problems of insecticides, bird-banding and other matters pertaining to our birdlife.

An example of the birds that are around us was seen during the excursion to Tarra Valley and Bulga Park, on the day following the meeting when, in spite of bad weather and limited time, we saw Pink and Rose Robins, Pilot-birds and other birds.

Mr. Wheeler's coverage of the subject was such that it was surprising to learn that the set of slides he showed us was but one of four that he has for the purpose, and when we consider the amount of time, study and field work that he and other photographers have done it is apparent that much knowledge of birdlife has been acquired. It would seem that all such information must be of value in the field of nature conservation.

ALONG SENINI'S TRACK: by Ern Homann.

After crossing the Tyers River on the Moe-Walhalla Road, the road begins to climb. Just as the cleared red soil country shows ahead, a signpost on the left side points to Senini's Track. Following the track down fairly steep grades, the Tyers River is crossed, a tributary creek comes next, and the country then begins to open out. If the track is followed right through it eventually joins the Tanjil Bren Forest Road, which leads back to the main bitumen road.

On Saturday the 19th. October Mr. Jim Peterson and I decided to explore the area along Senini's Track. The whole area was burnt over some twelve months ago and we reasoned that orchids, in which we were mainly interested, would be easier to see after a burn, and would perhaps be stimulated to flower well.

Parking the car near the creek bridge - a side track gives a good parking place - the first plant to come under notice was the tufted lily (Sowerbaea juncea). Previously I had found a few of these growing on the eastern side of the main road in the Moondarra Reservoir catchment area but had never seen the plants in quantity in our district. We were to see them this day as the lilies extend for 2½ miles along the track. How far they extend back we were not sure though in some places at least half a mile. The whole area that we explored is a garden with tussocky plants extending their 10 to 30 flower stems each topped by a lavender bunch of dainty flowers.

Plentiful too was the wax-lip orchid (Glossodia major), particularly on the drier slopes of the Hills near the road. There were many plants of the small grass-tree (Aanthorrhaea australis) in bud. The burn had been so complete that most mature shrubs had been burnt, but there was strong regeneration with seedling eucalypts, acacias and hakeas being predominant. The melaleucas - mainly squarrosa - were growing vigorously from the root-stock.

Our next exciting discovery came after lunch when the keen eyes of Mr. Peterson detected the flower of the orange-tip orchid (Caladenia aurantiaca). At first glance the small orchid seems like a white specimen of the very common pink fingers (Caladenia carnea), but on examination the labellum lacks the dark red bars typical of C. carnea. Moreover, the tip of the labellum is deep orange in colour. This orchid is rare and becoming much more rare due to the destruction of its habitat. It favours damp conditions on the edge of heathy swamps. After finding several more specimens - one a fine group of some dozen specimens - we gradually made our way towards the road along a low-lying damp area.

Almost back to the road, we were close to treading on a beautiful patch of the lizard orchid (Burnettia cuneata). The general impression of this flower is of white which shows clearly when the flower is open and this occurs, as with the sun orchids, on a warm day. Again there is some resemblance to a white-flowered pink fingers. However, the plant is much shorter - 2 to 4 inches high, and there are

(Along Senini's Track Cont'd)

1 - 5 flowers on the stem. The general impression of the plants, apart from the white part of the flowers is its purplish-brown colour. This is a very rare orchid. I have seen it once before, at Wonthaggi in 1931. Its habitat there has long since been destroyed. It is usually found under thickets of Melaleuca squarrosa, the scented paper-bark, and is usually noticed after fire. However, our patch on Senini's track was growing at the foot of a burnt hakea, probably H. pugniformis. Next day with a car-load from Melbourne, the Thompsons and Mr. Peterson, the many keen eyes found several smaller patches of Burnettia. Later I found a solitary flower in an adjacent gully. This was in association with M. squarrosa.

I would recommend a trip along Senini's Track to see the display of Tufted Lily and the Waxlip Orchids.

--- Ern Homann ---

BIRDS AND TREES ON THE SALE COMMON: by Lorna Padfield.

Returning from a Dutton excursion some members spent a short time near the Swing Bridge over the Latrobe River. From the cars we were able to observe a few of the many birds that have made their home on and in the Sale Common Wildlife Refuge. Here we saw the Little Egret, the Black Swan, Eastern Swamp Hen, Dusky Moor Hen and the White-faced Heron.

Walking in the vicinity of the river the birds to be seen included the Red-browed Finch, Firetail Finch and the Blue Wren which were darting in and out of the trees and shrubs as we passed by.

Driving along the western boundary of the refuge we saw many of the trees which had been planted by a few of the L.V.F.N. Club members during the tree planting programme carried out by the Fisheries and Wildlife Department of Victoria. The first planting, as reported by Mr. A. Roberts, of the department, was in 1964, when some 5,000 trees were planted. Since then trees to the number of somewhere in the vicinity of 60,000 have been planted in the Common.

The trees, chosen for the conditions existing in the area, were mainly Red Gums with some Black Wattles and Melaleucas and Tea-trees. There has been some losses, and the worst affected area is along the western boundary. This was not noticeable however as we drove by. Mr. Roberts said that on the eastern boundary along Flooding Creek there had been almost a 100% survival of the trees planted. They are now well established and should do well. More trees are to be planted.

--- Lorna Padfield ---

REVIEW: "FLOWERS AND PLANTS OF VICTORIA" by
Cochrane, Fuhrer, Rotheram and Willis. Published
by Reeds and the F.N.C. of Victoria.

Review by Miss Jean Galbraith.

This is the most beautiful book ever published on Victorian wildflowers. It is uniform with "New Zealand Flowers in Colour" also published by Reeds, and now in most of our town and regional libraries. At \$9.95 it may seem expensive (though it may seem less if you think of it as £4.19.6) but very few books of this quality are available at this price. It is quite large, 9 X 11 inches, allowing 4 - sometimes 3 - colour pictures, (each 4½ X 3 ins.) as well as descriptive captions.

There are 153 plates containing 543 colour pictures, all of high quality though in a very few instances (especially picture 15) the colour has not come successfully through the complexities of printing. The captions are by the Assistant Government Botanist, Mr. J.W. Willis, and that alone guarantees their high standard and complete reliability. To the authors dismay, in five cases of the 543, the caption applies to a different species from that illustrated. This thought to be due to last minute changes in the transparencies used, and is mentioned only so that the five corrections can be made, when every caption can be accepted with confidence.

The changes are to picture 51, change Styphelia ericoides to S. virgata; picture 248 from Lysiana exocarpi to Amyema praeissii; 258 Melaleuca ericoides to M. armillaris; 274 Azolla filiculoides to A. pin-nata, and 363 Hypericum japonicum to H. gramineum.

In addition to the very beautiful pictures and informative captions (30 or 40 words to several hundred words according to the space available) with scientific and common names there are 37 pages of descriptive text, discussing the main types of habitat in Victoria an enjoyable Preface by the Professor of Botany at Monash University, a glossary of the technical terms used (a relatively small number), list of protected plants, list of reference books, and a page of biographical notes on the four authors, S.R. Cochrane (biographer), B. Fuhrer and E. Rotheram (photographers) and Mr. Willis.

A few misprints in the text (not in the captions) must have distressed the authors, but they will not cause any confusion except on page 174 where the sandstone scarps of the Grampians are inadvertently described as limestone.

Very valuable indeed are the endpaper maps showing the 16 regions into which the State is divided. The grouping of the plants as illustrated is according to these regions - for example pp. 17 - 37 Heathlands; Stringybark and Peppermint Forests, pp. 116 - 125, Mountain Forests, pp. 126 - 141, Fern Gullies, pp. 142 - 147. The four mentioned cover our own district very well.

(Flowers and Plants of Victoria Cont'd)

I have never seen a book that gave better value to the purchaser, and it is undoubtedly a landmark amongst Victorian botanical publications - not a technical book, though technically accurate - not a mere picture book though the pictures are beautiful, and invaluable supplement to both technical and popular books now becoming available because of the beauty and range of its illustrations - showing roughly 1 in 5 of our Victorian flowering plants and ferns (with a few fungi for good measure).

Copies are available through the Latrobe Valley Field Naturalists Club.

--- Jean Galbraith ---

A NOTE ON THE C.A.E. SPRING SCHOOL: from Miss Jean Galbraith. (Leader and lecturer in Botany at the School).

The Spring School was most enjoyable, with the usual tutors (plus a photographer, Peter Hunter). Dr. Beavis for Geology, of course. There were fewer students than usual, 10 - 15 in the groups instead of 20 - 30, which was an advantage in that we could be more useful to them individually.

I have never seen the snow so heavy - even the snow plough didn't get up to Rocky Valley until the Thursday - and of course we couldn't have seen anything (except snow) had we gone up. However, it was pleasant and interesting walking down from Falls Creek until picked up by the bus.

After a wet beginning on the Saturday we had perfect weather.

--- Jean Galbraith ---

Contributions: The cupboard is practically bare and with little available for the January and February issues. Articles, of any length (within reason of course) will be gratefully received.

Please post to G.T. Scanlan, P.O. Box 95, Yallourn,
3838.

(Ed).

Latrobe Valley Naturalist.

Latrobe Valley Field Naturalists Club.

- Honorary Secretary: Mr. S. Belgraver, 179 Lloyd Street, Moc.
- Meetings: General meetings are held on the fourth Friday of each month at the Yallourn State School, commencing at 7.30 p.m.
- Excursions: Usually on the Saturday or Sunday after the general meeting, as shown on the programme for the year.
-

Warragul Field Naturalists Club.

- Honorary Secretary: Mr. Jack Brooks, Box No. 120, Warragul.
- Meetings: Are held on the third Friday of each month at the Albert Street, Warragul, State School, beginning at 8 p.m.
- Excursions: Are held as arranged, usually two weeks after the monthly general meeting.
-

Traralgon Field Naturalists Club.

- Honorary Secretary: Dr. D.W. Collins, 4 Charles Street, Traralgon.
- Meetings: Are held on the second Friday of each month at the Groy Street, Traralgon State School, starting at 7.30 p.m.
- Excursions: These are arranged usually for the Sunday following the general meeting.
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Each Club welcomes visitors to their meetings and excursions.

The Latrobe Valley Naturalist: Is the official publication of the Latrobe Valley Field Naturalists Club. Contributions on any aspect or branch of natural history are invited from any persons interested and should be addressed to the Honorary Editor, (Mr) G.T. Scanlan, P.O. Box 95, Yallourn, 3838.
